MOTT MACDONALD

Expansion of Hong Kong International Airport into a Three-Runway System

Construction Phase Monthly EM&A Report No.54 (For June 2020)

July 2020

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This Monthly EM&A Report No. 54 has been reviewed and certified by the Environmental Team Leader (ETL) in accordance with Condition 3.5 of Environmental Permit No. EP-489/2014.

Certified by: 

Terence Kong
Environmental Team Leader (ETL)
Mott MacDonald Hong Kong Limited

Date 14 July 2020

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By Email

Airport Authority Hong Kong
HKIA Tower, 1 Sky Plaza Road
Hong Kong International Airport
Lantau, Hong Kong

Attn: Mr. Lawrence Tsui, Principal Manager

14 July 2020

Dear Sir,

Contract No. 3102
3RS Independent Environmental Checker Consultancy Services

Submission of Monthly EM&A Report No. 54 (June 2020)

Reference is made to the Environmental Team's submission of the Monthly EM&A Report No. 54 under Condition 3.5 of the Environmental Permit No. EP-489/2014 certified by the ET Leader on 14 July 2020.

We write to verify the captioned submission in accordance with the requirement stipulated in Condition 3.5 of EP-489/2014.

Should you have any query, please feel free to contact the undersigned at 3922 9376.

Yours faithfully,
AECOM Asia Co. Ltd.

Jackel Law
Independent Environmental Checker

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Abbreviations

3RS	Three-Runway System
AAHK	Airport Authority Hong Kong
AECOM	AECOM Asia Company Limited
AFCD	Agriculture, Fisheries and Conservation Department
AIS	Automatic Information System
ANI	Encounter Rate of Number of Dolphins
APM	Automated People Mover
AW	Airport West
BHS	Baggage Handling System
C&D	Construction and Demolition
CAP	Contamination Assessment Plan
CAR	Contamination Assessment Report
CNP	Construction Noise Permit
CWD	Chinese White Dolphin
DCM	Deep Cement Mixing
DEZ	Dolphin Exclusion Zone
DO	Dissolved Oxygen
EAR	Ecological Acoustic Recorder
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring & Audit
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
FCZ	Fish Culture Zone
HDD	Horizontal Directional Drilling
HKBCF	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities
HKIA	Hong Kong International Airport
HOKLAS	Hong Kong Laboratory Accreditation Scheme
HSF	High Speed Ferry
HVS	High Volume Sampler
IEC	Independent Environmental Checker
LKC	Lung Kwu Chau
MTCC	Marine Traffic Control Centre
MMHK	Mott MacDonald Hong Kong Limited
MMWP	Marine Mammal Watching Plan
MSS	Maritime Surveillance System
MTRMP-CAV	Marine Travel Routes and Management Plan for Construction and Associated Vessel
NEL	Northeast Lantau
NWL	Northwest Lantau
PAM	Passive Acoustic Monitoring
SC	Sha Chau

SCLKCMP	Sha Chau and Lung Kwu Chau Marine Park
SS	Suspended Solids
SSSI	Site of Special Scientific Interest
STG	Encounter Rate of Number of Dolphin Sightings
SWL	Southwest Lantau
T2	Terminal 2
The Project	The Expansion of Hong Kong International Airport into a Three-Runway System
The SkyPier Plan	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier
The Manual	The Updated EM&A Manual
TSP	Total Suspended Particulates
WL	West Lantau
WMP	Waste Management Plan

Executive Summary

The "Expansion of Hong Kong International Airport into a Three-Runway System" (the Project) serves to meet the future air traffic demands at Hong Kong International Airport (HKIA). On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the Project was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual).

This is the 54th Construction Phase Monthly EM&A Report for the Project which summarises the monitoring results and audit findings of the EM&A programme during the reporting period from 1 to 30 June 2020.

Key Activities in the Reporting Period

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included deep cement mixing (DCM) works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based works on existing airport island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for Automated People Mover (APM) and Baggage Handling System (BHS), and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition, piling, and excavation works.

EM&A Activities Conducted in the Reporting Period

The monthly EM&A programme was undertaken in accordance with the Manual of the Project. Summary of the monitoring activities during this reporting period is presented as below:

Monitoring Activities	Number of Sessions
1-hour Total Suspended Particulates (TSP) air quality monitoring	36
Noise monitoring	20
Water quality monitoring	13
Vessel line-transect surveys for Chinese White Dolphin (CWD) monitoring	2
Land-based theodolite tracking survey effort for CWD monitoring	2

Environmental auditing works, including weekly site inspections of construction works conducted by the ET and bi-weekly site inspections conducted by the Independent Environmental Checker (IEC), audit of SkyPier High Speed Ferries (HSF), audit of construction and associated vessels, and audit of implementation of Marine Mammal Watching Plan (MMWP) and Dolphin Exclusion Zone (DEZ) Plan, were conducted in the reporting period. Based on information including ET's observations, records of Maritime Surveillance System (MSS), and contractors' site records, it is noted that environmental pollution control and mitigation measures were properly implemented and construction activities of the Project in the reporting period did not introduce adverse impacts to the sensitive receivers.

Snapshots of EM&A Activities in the Reporting Period

		
Dust Suppression Measure conducted by Contractor in new reclamation area	Land-Based Theodolite Tracking Survey for CWD at Sha Chau	Scrap metals generated from T2 re-configuration were sorted on-site and transported to a metal recycler for recycling

Results of Impact Monitoring

The monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, and CWD were conducted during the reporting period in accordance with the Manual.

Monitoring results of construction dust, construction noise, construction waste, and CWD did not trigger the corresponding Action and Limit Levels in the reporting period.

The water quality monitoring results for all parameters, except dissolved oxygen (DO), obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigation and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For DO, some of the testing results triggered the relevant Action and Limit Levels between 11 and 25 June 2020, and the corresponding investigations were conducted accordingly. There were no abnormal observations regarding construction activities during the water quality monitoring between 11 and 25 June 2020. Contractors were reminded to review construction activities and contractor's mitigation measures were found in place during site inspections by ET. The measured DO levels complied with the corresponding Action and Limit Levels after 25 June 2020. Additional monitoring was conducted in the vicinity of the affected IM stations for further investigation and the results were being analysed together with the construction activities being undertaken during water quality monitoring Further investigation findings will be reported in the next Monthly EM&A Report.

Summary of Upcoming Key Issues

Reclamation Works:

Contract 3205 DCM works

- DCM works

Contract 3206 Main Reclamation Works

- Land-based ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works; and
- Subgrade compaction and paving works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Trench excavation works;
- Backfilling and reinstatement works;
- Piling and structure works;
- King Post Construction; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Plant and equipment mobilisation;
- Footing and utilities work;
- Preparation works for box culvert construction;
- Bored pilling work; and
- Site establishment.

Contract 3307 Fire Training Facility

- Site establishment

Third Runway Concourse:

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Plant mobilisation;
- Bored pilling work; and
- Site establishment.

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 re-configuration;
- Excavation works;
- Utilities, drainage, and road work; and
- Piling and structure works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Construction of site office.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Excavation and backfilling; and
- Laying of drainage pipes and dusts.

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting;
- Superstructure; and
- Site Establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of temporary traffic steel deck;
- Cofferdam installation for box culvert;
- King Post;
- Backfilling work; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

- Site establishment.

Construction Support (Services / Licences):

Contract 3901A/ B Concrete Batching Facility

- Excavation work;
- Foundation work;
- Footing construction; and
- Erection of steelwork.

Summary Table

The following table summarises the key findings of the EM&A programme during the reporting period:

	Yes	No	Details	Analysis / Recommendation / Remedial Actions
Breach of Limit Level^		√	No breach of Limit Level was recorded.	Nil
Breach of Action Level^		√	No breach of Action Level was recorded.	Nil
Complaint Received		√	No construction activities - related complaint was received	Nil
Notification of any summons and status of prosecutions		√	No notification of summons or prosecution was received.	Nil
Change that affect the EM&A		√	There was no change to the construction works that may affect the EM&A.	Nil

Note:
^ Only triggering of Action or Limit Level found related to Project works is counted as Breach of Action or Limit Level.

1 Introduction

1.1 Background

On 7 November 2014, the Environmental Impact Assessment (EIA) Report (Register No.: AEIAR-185/2014) for the "Expansion of Hong Kong International Airport into a Three-Runway System" (the Project) was approved and an Environmental Permit (EP) (Permit No.: EP-489/2014) was issued for the construction and operation of the Project.

Airport Authority Hong Kong (AAHK) commissioned Mott MacDonald Hong Kong Limited (MMHK) to undertake the role of Environmental Team (ET) for carrying out the Environmental Monitoring & Audit (EM&A) works during the construction phase of the Project in accordance with the Updated EM&A Manual (the Manual) submitted under EP Condition 3.1[1]. AECOM Asia Company Limited (AECOM) was employed by AAHK as the Independent Environmental Checker (IEC) for the Project.

The Project covers the expansion of the existing airport into a three-runway system (3RS) with key project components comprising land formation of about 650 ha and all associated facilities and infrastructure including taxiways, aprons, aircraft stands, a passenger concourse, an expanded Terminal 2, all related airside and landside works and associated ancillary and supporting facilities. The submarine aviation fuel pipelines and submarine power cables also require diversion as part of the works.

Construction of the Project is to proceed in the general order of diversion of the submarine aviation fuel pipelines, diversion of the submarine power cables, land formation, and construction of infrastructure, followed by construction of superstructures.

The updated overall phasing programme of all construction works was presented in Appendix A of the Construction Phase Monthly EM&A Report No. 7 and the contract information was presented in **Appendix A**.

1.2 Scope of this Report

This is the 54th Construction Phase Monthly EM&A Report for the Project which summarises the key findings of the EM&A programme during the reporting period from 1 to 30 June 2020.

1.3 Project Organisation

The Project's organisation structure presented in Appendix B of the Construction Phase Monthly EM&A Report No.1 remained unchanged during the reporting period. Contact details of the key personnel are presented in **Table 1.1**.

[1] The Manual is available on the Project's dedicated website (accessible at: **http://env.threerunwaysystem.com/en/index.html**).

Table 1.1: Contact Information of Key Personnel

Party	Position	Name	Telephone
Project Manager's Representative (Airport Authority Hong Kong)	Principal Manager, Environment	Lawrence Tsui	2183 2734
Environmental Team (ET) (Mott MacDonald Hong Kong Limited)	Environmental Team Leader	Terence Kong	2828 5919
	Deputy Environmental Team Leader	Heidi Yu	2828 5704
	Deputy Environmental Team Leader	Daniel Sum	2585 8495
Independent Environmental Checker (IEC) (AECOM Asia Company Limited)	Independent Environmental Checker	Jackel Law	3922 9376
	Deputy Independent Environmental Checker	Roy Man	3922 9141

Reclamation Works:

Party	Position	Name	Telephone
Contract 3205 DCM (Package 5) (Bachy Soletanche - Sambo Joint Venture)	Deputy Project Director	Min Park	9683 0765
	Environmental Officer	William Chan	5408 3045
Contract 3206 Main Reclamation Works (ZHEC-CCCC-CDC Joint Venture)	Project Manager	Kim Chuan Lim	3763 1509
	Environmental Officer	Kwai Fung Wong	3763 1452

Airfield Works:

Party	Position	Name	Telephone
Contract 3301 North Runway Crossover Taxiway (FJT-CHEC-ZHEC Joint Venture)	Deputy Project Director	Kin Hang Chung	9800 0048
	Environmental Officer	Joe Wong	6182 0351
Contract 3302 Eastern Vehicular Tunnel Advance Works (China Road and Bridge Corporation)	Project Manager	Dickey Yau	5699 4503
	Environmental Officer	Dennis Ho	5645 0563
Contract 3303 Third Runway and Associated Works (SAPR Joint Venture)	Project Manager	Andrew Keung	6277 6628
	Environmental Officer	Max Chin	6447 5707
Contract 3307 Fire Training Facility (Paul Y. Construction Company Limited)	Project Manager	Steven Meredith	6109 1813
	Environmental Officer	Albert Chan	9700 1083

Third Runway Concourse:

Party	Position	Name	Telephone
Contract 3402 New Integrated Airport Centres Enabling Works (Wing Hing Construction Co., Ltd.)	Contract Manager	Michael Kan	9206 0550
	Environmental Officer	Lisa He	5374 3418
Contract 3403 New Integrated Airport Centres Building and Civil Works (Sun Fook Kong Construction Limited)	Project Manager	Alice Leung	9220 3162
	Environmental Officer	Alpha Chia	9626 1114
Contract 3405 Third Runway Concourse Foundation and Substructure Works (China Road and Bridge Corporation – Bachy Soletanche Group Limited – LT Sambo Co., Ltd. Joint Venture)	Project Manager	Francis Choi	9423 3469
	Environmental Officer	Cecilia Choi	9265 9352

Terminal 2 (T2) Expansion:

Party	Position	Name	Telephone
Contract 3503 Terminal 2 Foundation and Substructure Works (Leighton – Chun Wo Joint Venture)	Project Manager	Eric Wu	3973 1718
	Environmental Officer	Malcolm Leung	3973 0850

Automated People Mover (APM) and Baggage Handling System (BHS):

Party	Position	Name	Telephone
Contract 3601 New Automated People Mover System (TRC Line) (CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture)	Project Manager	Hongdan Wei	158 6180 9450
	Environmental Officer	K F Li	9086 1793
Contract 3602 Existing APM System Modification Works (Niigata Transys Co., Ltd.)	Project Manager	Kunihiro Tatecho	9755 0351
	Environmental Officer	Yolanda Gao	5399 3509
Contract 3603 3RS Baggage Handling System (VISH Consortium)	Project Manager	K C Ho	9272 9626
	Environmental Officer	Eric Ha	9215 3432

Construction Support (Facilities):

Party	Position	Name	Telephone
Contract 3721 Construction Support Infrastructure Works (China State Construction Engineering (Hong Kong) Ltd.)	Site Agent	Thomas Lui	9011 5340
	Environmental Officer	Xavier Lam	9493 2944

Party	Position	Name	Telephone
Contract 3722 Western Support Area – Construction Support Facilities (Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture)	Deputy Project Director	Philip Kong	9049 3161
	Environmental Officer	Sampson Lo	9752 9118

Airport Support Infrastructure:

Party	Position	Name	Telephone
Contract 3801 APM and BHS Tunnels on Existing Airport Island (China State Construction Engineering (Hong Kong) Ltd.)	Project Manager	Tony Wong	9642 8672
	Environmental Officer	Federick Wong	9842 2703
Contract 3802 APM and BHS Tunnels and Related Works (Gammon Construction Limited)	Project Director	John Adams	61116989
	Environmental Officer	Andy Leung	9489 0035

Construction Support (Services / Licences):

Party	Position	Name	Telephone
Contract 3901A Concrete Batching Facility (K. Wah Concrete Company Limited)	Project Manager	Benedict Wong	9553 2806
	Environmental Officer	C P Fung	9874 2872
Contract 3901B Concrete Batching Facility (Gammon Construction Limited)	Senior Project Manager	Gabriel Chan	2435 3260
	Environmental Officer	Rex Wong	2695 6319

1.4 Summary of Construction Works

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based works on existing airport island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

The locations of key construction activities are presented in **Figure 1.1**. **Figure 1.2** presents the latest layout of enhanced silt curtain deployed and a section of enhanced silt curtain phased out in this reporting period. In accordance with the Silt Curtain Deployment Plan, when a certain section of seawalls were partially completed with rock core to high tide mark and filter layer on the inner side, and an overlapping length of at least 150m for seawall and enhanced silt curtain was maintained, the enhanced silt curtain would be phased out.

1.5 Summary of EM&A Programme Requirements

The status for all environmental aspects are presented in **Table 1.2**. The EM&A requirements remained unchanged during the reporting period and details can be referred to Table 1.2 of the Construction Phase Monthly EM&A Report No. 1.

Table 1.2: Summary of status for all environmental aspects under the Updated EM&A Manual

Parameters	Status
Air Quality	
Baseline Monitoring	The baseline air quality monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Noise	
Baseline Monitoring	The baseline noise monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.
Impact Monitoring	On-going
Water Quality	
General Baseline Water Quality Monitoring for reclamation, water jetting and field joint works	The baseline water quality monitoring result has been reported in Baseline Water Quality Monitoring Report and submitted to EPD under EP Condition 3.4.
General Impact Water Quality Monitoring for reclamation, water jetting and field joint works	On-going
Initial Intensive Deep Cement Mixing (DCM) Water Quality Monitoring	The Initial Intensive DCM Monitoring Report was submitted and approved by EPD in accordance with the Detailed Plan on DCM.
Regular DCM Water Quality Monitoring	On-going
Waste Management	
Waste Monitoring	On-going
Land Contamination	
Supplementary Contamination Assessment Plan (CAP)	The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20.
Contamination Assessment Report (CAR) for Golf Course	The CAR for Golf Course was submitted to EPD.
Contamination Assessment Report (CAR) for Terminal 2 Emergency Power Supply System No.1 (Volumes 1 and 2)	The CAR for Terminal 2 Emergency Power Supply System No.1 (Volumes 1 and 2) was submitted to EPD.
Terrestrial Ecology	
Pre-construction Egretry Survey Plan	The Egretry Survey Plan was submitted and approved by EPD under EP Condition 2.14.
Ecological Monitoring	The terrestrial ecological monitoring at Sheung Sha Chau was completed in January 2019.
Marine Ecology	
Pre-Construction Phase Coral Dive Survey	The Coral Translocation Plan was submitted and approved by EPD under EP Condition 2.12.
Coral Translocation	The coral translocation was completed.
Post-Translocation Coral Monitoring	The post-translocation monitoring programme according to the Coral Translocation Plan was completed in April 2018.
Chinese White Dolphins (CWD)	
Vessel Survey, Land-based Theodolite Tracking and Passive Acoustic Monitoring (PAM)	
Baseline Monitoring	Baseline CWD results were reported in the CWD Baseline Monitoring Report and submitted to EPD in accordance with EP Condition 3.4.
Impact Monitoring	On-going
Landscape & Visual	
Landscape & Visual Plan	The Landscape & Visual Plan was submitted to EPD under EP Condition 2.18
Baseline Monitoring	The baseline landscape & visual monitoring result has been reported in Baseline Monitoring Report and submitted to EPD under EP Condition 3.4.

Parameters	Status
Impact Monitoring	On-going
Environmental Auditing	
Regular site inspection	On-going
Marine Mammal Watching Plan (MMWP) implementation measures	On-going
Dolphin Exclusion Zone (DEZ) Plan implementation measures	On-going
SkyPier High Speed Ferries (HSF) implementation measures	On-going
Construction and Associated Vessels Implementation measures	On-going
Complaint Hotline and Email channel	On-going
Environmental Log Book	On-going

Taking into account the construction works in this reporting period, impact monitoring of air quality, noise, water quality, waste management, landscape & visual, and CWD were carried out in the reporting period.

The EM&A programme also involved weekly site inspections and related auditing conducted by the ET for checking the implementation of the required environmental mitigation measures recommended in the approved EIA Report. To promote the environmental awareness and enhance the environmental performance of the contractors, environmental trainings and regular environmental management meetings were conducted during the reporting period, which are summarised as below:

- Two skipper training sessions provided by ET: 10 and 24 June 2020;
- One environmental briefing on EP and EM&A requirements of the 3RS Project provided by ET; and
- Twelve environmental management meetings for EM&A review with works contracts: 3, 5, 9, 10, 15, 17, 19, 24, 29 and 30 June 2020.

The EM&A programme has been following the recommendations presented in the approved EIA Report and the Manual. A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix B**.

2 Air Quality Monitoring

Air quality monitoring of 1-hour Total Suspended Particulates (TSP) was conducted three times every six days at two representative monitoring stations in the vicinity of air sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 2.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 2.1: Locations of Impact Air Quality Monitoring Stations

Monitoring Station	Location
AR1A	Man Tung Road Park
AR2	Village House at Tin Sum

2.1 Action and Limit Levels

In accordance with the Manual, baseline air quality monitoring of 1-hour TSP levels at the two air quality monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the air quality monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 2.2**.

Table 2.2: Action and Limit Levels of Air Quality Monitoring

Monitoring Station	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	306	500
AR2	298	

2.2 Monitoring Equipment

Portable direct reading dust meter was used to carry out the air quality monitoring. Details of equipment used in the reporting period are given in **Table 2.3**.

Table 2.3: Air Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Portable direct reading dust meter (Laser dust monitor)	SIBATA LD-3B-2 (Serial No. 296098)	24 Oct 2019	Monthly EM&A Report No. 46, Appendix E

2.3 Monitoring Methodology

2.3.1 Measuring Procedure

The measurement procedures involved in the impact air quality monitoring can be summarised as follows:

a. The portable direct reading dust meter was mounted on a tripod at a height of 1.2m above the ground.
b. Prior to the measurement, the equipment was set up for 1 minute span check and 6 second background check.

c. The one hour dust measurement was started. Site conditions and dust sources at the nearby area were recorded on a record sheet.

d. When the measurement completed, the “Count” reading per hour was recorded for result calculation.

2.3.2 Maintenance and Calibration

The portable direct reading dust meter is calibrated every year against high volume sampler (HVS) to check the validity and accuracy of the results measured by direct reading method. The calibration record of the HVS provided in Appendix E of the Construction Phase Monthly EM&A Report No. 46, and the calibration certificates of portable direct reading dust meters listed in **Table 2.3** are valid in the reporting period.

2.4 Summary of Monitoring Results

The air quality monitoring schedule involved in the reporting period is provided in **Appendix C**.

The air quality monitoring results in the reporting period are summarised in **Table 2.4**. Detailed impact monitoring results are presented in **Appendix D**.

Table 2.4: Summary of Air Quality Monitoring Results

Monitoring Station	1-hr TSP Concentration Range (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
AR1A	12 - 38	306	500
AR2	14 - 39	298	

The monitoring results were within the corresponding Action and Limit Levels at all monitoring stations in the reporting period.

General meteorological conditions throughout the impact monitoring period were recorded. Wind data including wind speed and wind direction for each monitoring day were collected from the Chek Lap Kok Wind Station.

2.5 Conclusion

No dust emission source was observed at the monitoring stations during the monitoring sessions. As the sensitive receivers were far away from the construction activities, with the implementation of dust control measures, there was no adverse impact at the sensitive receivers attributable to the works of the Project.

3 Noise Monitoring

Noise monitoring in the form of 30-minute measurements of L_{eq}, L_{10}, and L_{90} levels was conducted once per week between 0700 and 1900 on normal weekdays at four representative monitoring stations in the vicinity of noise sensitive receivers in Tung Chung and villages in North Lantau in accordance with the Manual. **Table 3.1** describes the details of the monitoring stations. **Figure 2.1** shows the locations of the monitoring stations.

Table 3.1: Locations of Impact Noise Monitoring Stations

Monitoring Station	Location	Type of measurement
NM1A	Man Tung Road Park	Free field
NM2(1)	Tung Chung West Development	To be determined
NM3A(2)	Site Office	Facade
NM4	Ching Chung Hau Po Woon Primary School	Free field
NM5	Village House in Tin Sum	Free field
NM6	House No. 1, Sha Lo Wan	Free field

Note:

(1) As described in Section 4.3.3 of the Manual, noise monitoring at NM2 will only commence after occupation of the future Tung Chung West Development.

(2) According to Section 4.3.3 of the Manual, the noise monitoring at NM3A was temporarily suspended starting from 1 September 2018 and would be resumed with the completion of the Tung Chung East Development.

3.1 Action and Limit Levels

In accordance with the Manual, baseline noise levels at the noise monitoring stations were established as presented in the Baseline Monitoring Report. The Action and Limit Levels of the noise monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 3.2**.

Table 3.2: Action and Limit Levels for Noise Monitoring

Monitoring Stations	Time Period	Action Level	Limit Level, $L_{eq(30mins)}$ dB(A)
NM1A, NM2, NM3A, NM4, NM5 and NM6	0700-1900 hours on normal weekdays	When one documented complaint is received from any one of the sensitive receivers	75dB(A)(1)

Note:

(1) The Limit Level for NM4 is reduced to 70dB(A) for being an educational institution. During school examination period, the Limit Level is further reduced to 65dB(A).

3.2 Monitoring Equipment

Noise monitoring was performed using sound level meter at each designated monitoring station. The sound level meters deployed comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications. Acoustic calibrator was used to check the sound level meters by a known sound pressure level for field measurement. Details of equipment used in the reporting period are given in **Table 3.3**.

Table 3.3: Noise Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Integrated Sound Level Meter	Rion NL-52 (Serial No. 00998505)	24 Mar 2020	Monthly EM&A Report No. 52, Appendix D
	Rion NL-52 (Serial No. 01287679)	21 Jun 2020	**Appendix E**
Acoustic Calibrator	Casella CEL-120/1 (Serial No. 2383737)	21 Sep 2019	Monthly EM&A Report No. 45, Appendix D
	Castle GA607 (Serial No. 040162)	14 Jul 2019	Monthly EM&A Report No. 43, Appendix D

3.3 Monitoring Methodology

3.3.1 Monitoring Procedure

The monitoring procedures involved in the noise monitoring can be summarised as follows:

a. The sound level meter was set on a tripod at least a height of 1.2m above the ground for free-field measurements at monitoring stations NM1A, NM4, NM5 and NM6. A correction of +3dB(A) was applied to the free field measurements.
b. Façade measurements were made at the monitoring station NM3A.
c. Parameters such as frequency weighting, time weighting and measurement time were set.
d. Prior to and after each noise measurement, the meter was calibrated using the acoustic calibrator. If the difference in the calibration level before and after measurement was more than 1dB(A), the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
e. During the monitoring period, L_{eq}, L_{10} and L_{90} were recorded. In addition, site conditions and noise sources were recorded on a record sheet.
f. Noise measurement results were corrected with reference to the baseline monitoring levels.
g. Observations were recorded when high intrusive noise (e.g. dog barking, helicopter noise) was observed during the monitoring.

3.3.2 Maintenance and Calibration

The maintenance and calibration procedures are summarised below:

a. The microphone head of the sound level meter was cleaned with soft cloth at regular intervals.
b. The meter and calibrator were sent to the supplier or laboratory accredited under Hong Kong Laboratory Accreditation Scheme (HOKLAS) to check and calibrate at yearly intervals.

Calibration certificates of the sound level meters and acoustic calibrators used in the noise monitoring listed in **Table 3.3** are valid in the reporting period.

3.4 Summary of Monitoring Results

The noise monitoring schedule involved in the reporting period is provided in **Appendix C**.

The noise monitoring results in the reporting period are summarised in **Table 3.4**. Detailed impact monitoring results are presented in **Appendix D**.

Table 3.4: Summary of Construction Noise Monitoring Results

Monitoring Station	Noise Level Range, dB(A) $L_{eq\ (30mins)}$	Limit Level, dB(A) $L_{eq\ (30mins)}$
NM1A(1)	67 - 73	75
NM4(1)	60 - 64	70(2)
NM5(1)	55 - 64	75
NM6(1)	62 - 66	75

Notes:

(1) +3dB(A) Façade correction included;

(2) Reduced to 65dB(A) during school examination periods at NM4. School examination took place from 22 to 23 June during this reporting period.

No complaints were received from any sensitive receiver that triggered the Action Level. All monitoring results were also within the corresponding Limit Levels at all monitoring stations in the reporting period.

3.5 Conclusion

As the construction activities were far away from the monitoring stations, major sources of noise dominating the monitoring stations observed during the construction noise impact monitoring were traffic noise near NM1A and aircraft noise near NM6 during this reporting period. It is considered that the monitoring work during the reporting period was effective and there was no adverse impact attributable to the Project activities.

4 Water Quality Monitoring

Water quality monitoring of DO, pH, temperature, salinity, turbidity, suspended solids (SS), total alkalinity, chromium, and nickel was conducted three days per week, at mid-ebb and mid-flood tides, at a total of 23 water quality monitoring stations, comprising 12 impact (IM) stations, 8 sensitive receiver (SR) stations and 3 control (C) stations in the vicinity of water quality sensitive receivers around the airport island in accordance with the Manual. The purpose of water quality monitoring at the IM stations is to promptly capture any potential water quality impact from the Project before it could become apparent at sensitive receivers (represented by the SR stations). **Table 4.1** describes the details of the monitoring stations. **Figure 4.1** shows the locations of the monitoring stations.

Table 4.1: Monitoring Locations and Parameters of Impact Water Quality Monitoring

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
C1	Control Station	804247	815620	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)
C2	Control Station	806945	825682	
C3(3)	Control Station	817803	822109	
IM1	Impact Station	807132	817949	
IM2	Impact Station	806166	818163	
IM3	Impact Station	805594	818784	
IM4	Impact Station	804607	819725	
IM5	Impact Station	804867	820735	
IM6	Impact Station	805828	821060	
IM7	Impact Station	806835	821349	
IM8	Impact Station	808140	821830	
IM9	Impact Station	808811	822094	
IM10	Impact Station	809794	822385	
IM11	Impact Station	811460	822057	
IM12	Impact Station	812046	821459	
SR1A(1)	Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) Seawater Intake for cooling	812660	819977	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR2(3)	Planned marine park / hard corals at The Brothers / Tai Mo To	814166	821463	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS DCM Parameters Total Alkalinity, Heavy Metals(2)(4)
SR3	Sha Chau and Lung Kwu Chau Marine Park / fishing and spawning grounds in North Lantau	807571	822147	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR4A	Sha Lo Wan	807810	817189	

Monitoring Station	Description	Coordinates		Parameters
		Easting	Northing	
SR5A	San Tau Beach SSSI	810696	816593	General Parameters DO, pH, Temperature, Salinity, Turbidity, SS
SR6A(5)	Tai Ho Bay, Near Tai Ho Stream SSSI	814739	817963	
SR7	Ma Wan Fish Culture Zone (FCZ)	823742	823636	
SR8(6)	Seawater Intake for cooling at Hong Kong International Airport (East)	811623	820390	

Notes:

(1) With the operation of HKBCF, water quality monitoring at SR1A station was commenced on 25 October 2018. To better reflect the water quality in the immediate vicinity of the intake, the monitoring location of SR1A has been shifted closer to the intake starting from 5 January 2019.

(2) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (**http://env.threerunwaysystem.com/en/ep-submissions.html**). DCM specific water quality monitoring parameters (total alkalinity and heavy metals) were only conducted at C1 to C3, SR2, and IM1 to IM12.

(3) According to the Baseline Water Quality Monitoring Report, C3 station is not adequately representative as a control station of impact/ SR stations during the flood tide. The control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

(4) Total alkalinity and heavy metals results are collected at SR2 as a control station for regular DCM monitoring.

(5) As the access to SR6 was obstructed by the construction activities and temporary structures for Tung Chung New Town Extension, the monitoring location has been relocated to SR6A starting from 8 August 2019.

(6) The monitoring location for SR8 is subject to further changes due to silt curtain arrangements and the progressive relocation of this seawater intake.

4.1 Action and Limit Levels

In accordance with the Manual, baseline water quality levels at the above-mentioned representative water quality monitoring stations were established as presented in the Baseline Water Quality Monitoring Report. The Action and Limit Levels of general water quality monitoring and regular DCM monitoring stipulated in the EM&A programme for triggering the relevant investigation and follow-up procedures under the programme are provided in **Table 4.2**. The control and impact stations during ebb tide and flood tide for general water quality monitoring and regular DCM monitoring are presented in **Table 4.3**.

Table 4.2: Action and Limit Levels for General Water Quality Monitoring and Regular DCM Monitoring

Parameters		Action Level (AL)		Limit Level (LL)	
Action and Limit Levels for general water quality monitoring and regular DCM monitoring (excluding SR1A & SR8)					
General Water Quality Monitoring	DO in mg/l (Surface, Middle & Bottom)	Surface and Middle 4.5mg/l		Surface and Middle 4.1mg/l 5mg/l for Fish Culture Zone (SR7) only	
		Bottom 3.4mg/l		Bottom 2.7mg/l	
	Suspended Solids (SS) in mg/l	23	or 120% of upstream control station at the same tide of the same day, whichever is higher	37	or 130% of upstream control station at the same tide of the same day, whichever is higher
	Turbidity in NTU	22.6		36.1	
Regular DCM Monitoring	Total Alkalinity in ppm	95		99	
	Representative Heavy Metals for regular DCM monitoring (Chromium) in µg/l	0.2		0.2	
	Representative Heavy Metals for regular DCM monitoring (Nickel) in µg/l	3.2		3.6	
Action and Limit Levels SR1A					
SS (mg/l))		33		42	
Action and Limit Levels SR8					
SS (mg/l)		52		60	

Notes:

(1) For DO measurement, non-compliance occurs when monitoring result is lower than the limits.

(2) For parameters other than DO, non-compliance of water quality results when monitoring results is higher than the limits.

(3) Depth-averaged results are used unless specified otherwise.

(4) Details of selection criteria for the two heavy metals for regular DCM monitoring refer to the Detailed Plan on Deep Cement Mixing available on the dedicated 3RS website (**http://env.threerunwaysystem.com/en/ep-submissions.html**)

(5) The Action and Limit Levels for the two representative heavy metals chosen will be the same as that for the intensive DCM monitoring.

Table 4.3: The Control and Impact Stations during Flood Tide and Ebb Tide for General Water Quality Monitoring and Regular DCM Monitoring

Control Station	Impact Stations
Flood Tide	
C1	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, SR3
SR2[(1)]	IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR3, SR4A, SR5A, SR6A, SR8
Ebb Tide	
C1	SR4A, SR5A, SR6A
C2	IM1, IM2, IM3, IM4, IM5, IM6, IM7, IM8, IM9, IM10, IM11, IM12, SR1A, SR2, SR3, SR7, SR8

Note:

(1) As per findings of Baseline Water Quality Monitoring Report, the control reference has been changed from C3 to SR2 from 1 September 2016 onwards.

4.2 Monitoring Equipment

Table 4.4 summarises the equipment used in the reporting period for monitoring of specific water quality parameters under the water quality monitoring programme.

Table 4.4: Water Quality Monitoring Equipment

Equipment	Brand and Model	Last Calibration Date	Calibration Certificate Provided in
Multifunctional Meter (measurement of DO, pH, temperature, salinity and turbidity)	YSI 6920V2 (Serial No. 0001C6A7)	21 Apr 2020	Monthly EM&A Report No. 52, Appendix D
	YSI 6920V2 (Serial No. 00019CB2)	21 Apr 2020	
	YSI ProDSS (Serial No. 17H105557)	11 Mar 2020 (1)	Monthly EM&A Report No. 51, Appendix E
	YSI ProDSS (Serial No. 18A104824)	11 Mar 2020 (1)	
	YSI ProDSS (Serial No. 16H104234)	10 Jun 2020	**Appendix E**
	YSI ProDSS (Serial No. 17E100747)	10 Jun 2020	
Digital Titrator (measurement of total alkalinity)	Titrette Bottle-top Burette, 50ml (Serial No. 10N60623)	1 Jun 2020	**Appendix E**

Note:

(1) The monitoring equipment was not used in the reporting period after the expiry date of the calibration certificate.

Other equipment used as part of the impact water quality monitoring programme are listed in **Table 4.5**.

Table 4.5: Other Monitoring Equipment

Equipment	Brand and Model
Water Sampler	Van Dorn Water Sampler
Positioning Device (measurement of GPS)	Garmin eTrex Vista HCx
Current Meter (measurement of current speed and direction, and water depth)	Sontek HydroSurveyor

4.3 Monitoring Methodology

4.3.1 Measuring Procedure

Water quality monitoring samples were taken at three depths (at 1m below surface, at mid-depth, and at 1m above bottom) for locations with water depth >6m. For locations with water depth between 3m and 6m, water samples were taken at two depths (surface and bottom). For locations with water depth <3m, only the mid-depth was taken. Duplicate water samples were taken and analysed.

The water samples for all monitoring parameters were collected, stored, preserved and analysed according to the Standard Methods, APHA 22nd ed. and/or other methods as agreed by the EPD. In-situ measurements at monitoring locations including temperature, pH, DO, turbidity, salinity, alkalinity and water depth were collected by equipment listed in **Table 4.4** and **Table 4.5**. Water samples for heavy metals and SS analysis were stored in high density polythene bottles with no preservative added, packed in ice (cooled to 4ºC without being frozen), delivered to the laboratory within 24 hours of collection.

4.3.2 Maintenance and Calibration

Calibration of In-situ Instruments

All in-situ monitoring instrument was checked, calibrated and certified by a laboratory accredited under HOKLAS before use. Responses of sensors and electrodes were checked with certified standard solutions before each use.

Wet bulb calibration for a DO meter was carried out before commencement of monitoring and after completion of all measurements each day. Calibration was not conducted at each monitoring location as daily calibration is adequate for the type of DO meter employed. A zero check in distilled water was performed with the turbidity probe at least once per monitoring day. The probe was then calibrated with a solution of known NTU. In addition, the turbidity probe was calibrated at least twice per month to establish the relationship between turbidity readings (in NTU) and levels of SS (in mg/l). Accuracy check of the digital titrator was performed at least once per monitoring day.

Calibration certificates of the monitoring equipment used in the reporting period are listed in **Table 4.4**.

4.3.3 Laboratory Measurement / Analysis

Analysis of SS and heavy metals have been carried out by a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd (Reg. No. HOKLAS 066). Sufficient water samples were collected at all the monitoring stations for carrying out the laboratory SS and heavy metals determination. The SS and heavy metals determination works were started within 24 hours after collection of the water samples. The analysis of SS and heavy metals have followed the standard methods summarised in **Table 4.6**. The QA/QC procedures for laboratory measurement/ analysis of SS and heavy metals were presented in Appendix F of the Construction Phase Monthly EM&A Report No.8.

Table 4.6: Laboratory Measurement/ Analysis of SS and Heavy Metals

Parameters	Instrumentation	Analytical Method	Reporting Limit
SS	Analytical Balance	APHA 2540D	2mg/l
Heavy Metals			
Chromium (Cr)	ICP-MS	USEPA 6020A	0.2µg/l
Nickel (Ni)	ICP-MS	USEPA 6020A	0.2µg/l

4.4 Summary of Monitoring Results

The water quality monitoring schedule for the reporting period is updated and provided in **Appendix C**.

The water quality monitoring results for all parameters, except DO, obtained during the reporting period were within their corresponding Action and Limit Levels. The detailed monitoring results are presented in **Appendix D**.

For DO, some of the testing results triggered the corresponding Action and Limit Levels, and investigations were conducted accordingly.

Table 4.7 to **Table 4.10** present the summary of the DO compliance status at IM and SR stations during mid-ebb and mid-flood tide for the reporting period.

Table 4.7: Summary of DO (Surface and Middle) Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6A	SR7
02/06/2020																		
04/06/2020																		
06/06/2020																		
09/06/2020																		
11/06/2020		D	D	D											D			
13/06/2020		D	D	D											D			D
16/06/2020		D	D															
18/06/2020																		
20/06/2020			D															
23/06/2020																		
25/06/2020																		
27/06/2020																		
30/06/2020																		
No. of result triggering Action or Limit Level	0	3	4	2	2	2	2	1	0	0	0	0	0	2	2	0	0	1

Table 4.8: Summary of DO (Bottom) Compliance Status (Mid-Ebb Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR2	SR3	SR4A	SR5A	SR6A	SR7
02/06/2020																		
04/06/2020																		
06/06/2020																		
09/06/2020																		
11/06/2020	D	D	D	D											D			
13/06/2020		D	D	D											D			
16/06/2020		D	D	D														
18/06/2020		D	D	D											D			
20/06/2020		D	D												D			
23/06/2020		D	D												D			
25/06/2020		D													D			
27/06/2020																		
30/06/2020																		
No. of result triggering Action or Limit Level	1	7	6	4	1	1	1	0	0	0	0	0	0	0	6	0	0	0

Table 4.9: Summary of DO (Surface and Middle) Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6A	SR7
02/06/2020																	
04/06/2020																	
06/06/2020																	
09/06/2020																	
11/06/2020																	
13/06/2020					D		D						D				
16/06/2020																	
18/06/2020																	
20/06/2020																	
23/06/2020																	
25/06/2020																	
27/06/2020																	
30/06/2020																	
No. of result triggering Action or Limit Level	0	2	2	2	1	0	1	0	0	0	0	0	1	0	0	0	0

Table 4.10: Summary of DO (Bottom) Compliance Status (Mid-Flood Tide)

	IM1	IM2	IM3	IM4	IM5	IM6	IM7	IM8	IM9	IM10	IM11	IM12	SR3	SR4A	SR5A	SR6A	SR7
02/06/2020																	
04/06/2020																	
06/06/2020																	
09/06/2020																	
11/06/2020							D										
13/06/2020					D	D	D						D				
16/06/2020																	
18/06/2020																	
20/06/2020																	
23/06/2020																	
25/06/2020																	
27/06/2020																	
30/06/2020																	
No. of result triggering Action or Limit Level	0	1	2	1	1	1	2	0	0	0	0	0	1	2	0	0	0

Note: Detailed results are presented in **Appendix D**.	
Legend:	
	The monitoring results were within the corresponding Action and Limit Levels
	Monitoring result triggered the Action Level at monitoring station located upstream of the Project based on dominant tidal flow
D	Monitoring result triggered the Action Level at monitoring station located downstream of the Project based on dominant tidal flow
	Monitoring result triggered the Limit Level at monitoring station located upstream of the Project based on dominant tidal flow
D	Monitoring result triggered the Limit Level at monitoring station located downstream of the Project based on dominant tidal flow
	Upstream station with respect to the Project during the respective tide based on dominant tidal flow

Monitoring results triggered the corresponding Action and Limit Levels on seven monitoring days. In accordance with Event and Action Plan stipulated in the Manual, EPD, IEC and Contractor were informed when the corresponding Action and Limit Levels were triggered. Repeat measurement were conducted on 12, 17, 19, 21, 22, 24 and 26 June 2020 respectively. The repeat measurement on 14 June 2020 was cancelled due to Strong Wind Signal No.3 in force. Some cases occurred at monitoring stations upstream of the Project during respective tide and would unlikely be affected by the Project.

Investigations focusing on the cases that occurred at monitoring stations located downstream of the Project were carried out. Details of the Project's marine construction activities and site observations on the concerned monitoring days were collected. Findings were summarized in **Table 4.11**.

Table 4.11: Summary of Findings from Investigation of DO Monitoring Results

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
11/6/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	No	No	No
13/6/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	No	No	No

Date	Marine construction works nearby	Approximate distance from marine construction works	Status of water quality measures (if applicable)	Construction vessels in the vicinity	Turbidity / Silt plume observed near the monitoring station	Action or Limit Level triggered due to Project
16/6/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	No	No	No
18/6/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	Yes	No	No
20/6/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	No	No	No
23/6/2020	DCM works	Around 1km	Localised and enhanced silt curtain deployed	No	No	No
25/6/2020	Marine filling	Around 3km	Enhanced silt curtain deployed	No	No	No

The investigation confirmed that DCM works and marine filling were operating normally with localised and enhanced silt curtains deployed. The silt curtains were maintained properly and checked by ET regularly. It is noted that a construction vessel was observed in the vicinity of IM4 during monitoring on 18 June 2020, however, there was no abnormal observation found.

For DO results recorded at SR7 on 13 June 2020, DO concentrations were within their corresponding baseline ranges during baseline monitoring of the Project. No Action or Limit Level was triggered at downstream impact stations located closer to the Project Area, namely IM11. This suggests that the station was potentially affected by external sources. With no silt plume observed at the monitoring station and mitigation measures implemented properly, the single case recorded at SR7 was considered not due to the Project.

For DO results recorded at SR4A on 11, 13, 18, 20, 23 and 25 June 2020, DO concentrations were within their corresponding baseline ranges during baseline monitoring of the Project. Except on 11 June 2020, no Action or Limit Level was triggered at downstream impact stations located closer to the Project Area, namely IM1. Therefore, the cases at SR4A appears to be primarily affected by external sources. As no silt plume was observed at the monitoring station and mitigation measures implemented properly, the concerned cases recorded at SR4A were considered unlikely due to the Project.

For the downstream IM stations with consecutive DO Action or Limit Levels triggered between 11 to 25 June 2020, repeat measurements were conducted and there were no abnormal observations regarding construction activities during the monitoring. Contractors were reminded to review construction activities and contractor's mitigation measures were found in place during site inspections by ET. The water monitoring results obtained after 25 June 2020 were within the corresponding Action and Limit Levels. To further study the cases recorded between 11 to 25 June 2020, additional monitoring was conducted in the vicinity of the affected IM stations and being analysed together with the construction activities being undertaken during the water quality monitoring. The findings of further investigation for the cause of these cases will be reported in the next Monthly EM&A Report.

4.5 Conclusion

During the reporting period, it is noted that the vast majority of monitoring results were within their corresponding Action and Limit Levels, while a number of DO measurement results triggered the corresponding Action and Limit Levels, and investigations were conducted accordingly.

Based on the investigation findings, the DO measurement results that triggered the corresponding Action or Limit Levels at sensitive receiver stations were not due to the Project. For the downstream IM stations with consecutive DO Action or Limit Levels triggered between 11 to 25 June 2020, additional monitoring was conducted in the vicinity of the affected IM stations as part of further investigations as there were no abnormal observations regarding construction activities. Contractors were reminded to review construction activities and contractor's mitigation measures were found in place during site inspections by ET. Further investigation for downstream IM stations are still in progress and will be updated in the next Monthly EM&A Report.

Nevertheless, as part of the EM&A programme, the construction methods and mitigation measures for water quality will continue to be monitored and opportunities for further enhancement will continue to be explored and implemented where possible, to strive for better protection of water quality and the marine environment.

In the meantime, the contractors were reminded to implement and maintain all mitigation measures during weekly site inspection and regular environmental management meetings. These include maintaining mitigation measures properly for reclamation works including DCM works, marine filling, and seawall construction as recommended in the Manual.

5 Waste Management

In accordance with the Manual, the waste generated from construction activities was audited once per week to determine if wastes are being managed in accordance with the Waste Management Plan (WMP) prepared for the Project, contract-specific WMP, and any statutory and contractual requirements. All aspects of waste management including waste generation, storage, transportation and disposal were assessed during the audits.

5.1 Action and Limit Levels

The Action and Limit Levels of the construction waste are provided in **Table 5.1**.

Table 5.1: Action and Limit Levels for Construction Waste

Monitoring Stations	Action Level	Limit Level
Construction Area	When one valid documented complaint is received	Non-compliance of the WMP, contract-specific WMPs, any statutory and contractual requirements

5.2 Waste Management Status

Weekly monitoring on all works contracts were carried out by the ET to check and monitor the implementation of proper waste management practices during the construction phase.

Recommendations made included provision and maintenance of proper chemical waste storage area, as well as handling, segregation, and regular disposal of general refuse. The contractors had taken actions to implement the recommended measures. Waste management audits were carried out by ET according to the requirement of the Waste Management Plan, Updated EM&A Manual and the implementation schedule of the waste management mitigation measures in **Appendix B**.

Based on updated information provided by contractors, construction waste generated in the reporting period is summarised in **Table 5.2**. Proactive measures have been undertaken during the re-configuration of T2 building. The contractor has established the recycling strategy for C&D materials with proper planning and design to maximize recycling and reuse. Dedicated recyclers were employed for different kinds of recyclable materials by the contractor, and ET and IEC have carried out site visit to recyclers' faciltities to review recycling process. Recycling materials before leaving the site are weighted by a weight bridge and monitored by CCTV system. Dedicated areas for sorting of materials are established on site. Recyclable materials such as scrap steel, cables, aluminum, structural steel and glasses are sorted on-site and transported off-site for recycling. ET and IEC has carried out site audits regularly and reviewed the trip ticket system.

There were no complaints, non-compliance of the WMP, contract-specific WMPs, statutory and contractual requirements that triggered Action and Limit Levels in the reporting period.

Along with the design and construction progress, further development on the treatment level/details and the re-use mode for marine sediment generated from 3RS Project has been conducted according to the EIA recommendation.

Table 5.2: Construction Waste Statistics

	C&D[1] Material Stockpiled for Reuse or Recycle (m^3)	C&D Material Reused in the Project (m^3)	C&D Material Reused in other Projects (m^3)	C&D Material Transferred to Public Fill (m^3)	Chemical Waste (kg)	Chemical Waste (l)	General Refuse (tonne)
May 2020[2][3]	3,424	39,321*	0	2,871	60	2,000	1131
June 2020[2][4]	3,903	24,450	0	3,164	0	0	736

Notes:

(1) C&D refers to Construction and Demolition.

(2) Metals, paper and/or plastics were recycled in the reporting period.

(3) Updated figure for the previous month is reported and marked with an asterisk (*). Updated figures for earlier months will be reported in the forthcoming Annual EM&A Report.

(4) The data was based on the information provided by contractors up to the submission date of this Monthly EM&A Report, and might be updated in the forthcoming Monthly EM&A Report.

6 Chinese White Dolphin Monitoring

In accordance with the Manual, CWD monitoring by small vessel line-transect survey supplemented by land-based theodolite tracking survey and passive acoustic monitoring should be conducted during construction phase.

The small vessel line-transect survey should be conducted at a frequency of two full surveys per month, while land-based theodolite tracking survey should be conducted at a frequency of one day per month per station at Sha Chau (SC) and Lung Kwu Chau (LKC) during the construction phase as stipulated in the Manual.

6.1 Action and Limit Levels

The Action and Limit Levels for CWD monitoring were formulated by the action response approach using the running quarterly dolphin encounter rates STG and ANI derived from the baseline monitoring data, as presented in the CWD Baseline Monitoring Report. The derived values of Action and Limit Levels for CWD monitoring were summarised in **Table 6.1**.

Table 6.1: Derived Values of Action and Limit Levels for Chinese White Dolphin Monitoring

	NEL, NWL, AW, WL and SWL as a Whole
Action Level(3)	Running quarterly(1) STG < 1.86 & ANI < 9.35
Limit Level(3)	Two consecutive running quarterly(2) (3-month) STG < 1.86 & ANI < 9.35

Notes: (referring to the baseline monitoring report)

(1) Action Level – running quarterly encounter rates STG & ANI of this month will be calculated from the reporting period and the two preceding survey months.

(2) Limit Level – two consecutive running quarters mean both the running quarterly encounter rates of the preceding month and the running quarterly encounter rates of this month.

(3) Action Level and/or Limit Level will be triggered if both STG and ANI fall below the criteria.

6.2 CWD Monitoring Transects and Stations

6.2.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys were conducted along the transects covering Northeast Lantau (NEL), Northwest Lantau (NWL), Airport West (AW), West Lantau (WL) and Southwest Lantau (SWL) areas as proposed in the Manual, which are consistent with the Agriculture, Fisheries and Conservation Department (AFCD) long-term monitoring programme (except the addition of AW). The AW transect has not been previously surveyed in the AFCD programme due to the restrictions of HKIA Approach Area, nevertheless, this transect was established during the EIA of the 3RS Project and refined in the Manual with the aim to collect project specific baseline information within the HKIA Approach Area to fill the data gap that was not covered by the AFCD programme. This also provided a larger sample size for estimating the density, abundance and patterns of movements in the broader study area of the project.

The planned vessel survey transect lines following the waypoints set for construction phase monitoring as proposed in the Manual are depicted in **Figure 6.1** with the waypoint coordinates of all transect lines given in **Table 6.2**, which are subject to on-site refinement based on the actual survey conditions and constraints.

Table 6.2: Coordinates of Transect Lines in NEL, NWL, AW, WL and SWL Survey Areas

Waypoint	Easting	Northing	Waypoint	Easting	Northing
		NEL			
1S	813525	820900	6N	818568	824433
1N	813525	824657	7S	819532	821420
2S	814556	818449	7N	819532	824209
2N	814559	824768	8S	820451	822125
3S	815542	818807	8N	820451	823671
3N	815542	824882	9S	821504	822371
4S	816506	819480	9N	821504	823761
4N	816506	824859	10S	822513	823268
5S	817537	820220	10N	822513	824321
5N	817537	824613	11S	823477	823402
6S	818568	820735	11N	823477	824613
		NWL			
1S	804671	814577	5S	808504	821735
1N	804671	831404	5N	808504	828602
2Sb	805475	815457	6S	809490	822075
2Nb	805476	818571	6N	809490	825352
2Sa	805476	820770	7S	810499	822323
2Na	805476	830562	7N	810499	824613
3S	806464	821033	8S	811508	821839
3N	806464	829598	8N	811508	824254
4S	807518	821395	9S	812516	821356
4N	807518	829230	9N	812516	824254
		AW			
1W	804733	818205	2W	805045	816912
1E	806708	818017	2E	805960	816633
		WL			
1W	800600	805450	7W	800400	811450
1E	801760	805450	7E	802400	811450
2W	800300	806450	8W	800800	812450
2E	801750	806450	8E	802900	812450
3W	799600	807450	9W	801500	813550
3E	801500	807450	9E	803120	813550
4W	799400	808450	10W	801880	814500
4E	801430	808450	10E	803700	814500
5W	799500	809450	11W	802860	815500
5E	801300	809450	12S/11E	803750	815500
6W	799800	810450	12N	803750	818500
6E	801400	810450			
		SWL			
1S	802494	803961	6S	807467	801137
1N	802494	806174	6N	807467	808458
2S	803489	803280	7S	808553	800329
2N	803489	806720	7N	808553	807377
3S	804484	802509	8S	809547	800338
3N	804484	807048	8N	809547	807396
4S	805478	802105	9S	810542	800423
4N	805478	807556	9N	810542	807462

Waypoint	Easting	Northing	Waypoint	Easting	Northing
5S	806473	801250	10S	811446	801335
5N	806473	808458	10N	811446	809436

6.2.2 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey stations were set up at two locations, one facing east/south/west on the southern slopes of Sha Chau (SC), and the other facing north/northeast/northwest at Lung Kwu Chau (LKC). The stations (D and E) are depicted in **Figure 6.2** and shown in **Table 6.3** with position coordinates, height of station and approximate distance of consistent theodolite tracking capabilities for CWD.

Table 6.3: Land-based Theodolite Survey Station Details

Stations	Location	Geographical Coordinates	Station Height (m)	Approximate Tracking Distance (km)
D	Sha Chau (SC)	22° 20' 43.5" N 113° 53' 24.66" E	45.66	2
E	Lung Kwu Chau (LKC)	22° 22' 44.83" N 113° 53' 0.2" E	70.40	3

6.3 CWD Monitoring Methodology

6.3.1 Small Vessel Line-transect Survey

Small vessel line-transect surveys provided data for density and abundance estimation and other assessments using distance-sampling methodologies, specifically, line-transect methods.

The surveys involved small vessel line-transect data collection and have been designed to be similar to, and consistent with, previous surveys for the AFCD for their long-term monitoring of small cetaceans in Hong Kong. The survey was designed to provide systematic, quantitative measurements of density, abundance and habitat use.

As mentioned in **Section 6.2.1**, the transects covered NEL, NWL, AW, WL and SWL areas as proposed in the Manual, which are consistent with the AFCD long-term monitoring programme (except AW). There are two types of transect lines:

- Primary transect lines: the parallel and zigzag transect lines as shown in **Figure 6.1**; and
- Secondary transect lines: transect lines connecting between the primary transect lines and going around islands.

All data collected on both primary and secondary transect lines were used for analysis of sighting distribution, group size, activities including association with fishing boat, and mother-calf pairs. Only on-effort data collected under conditions of Beaufort 0-3 and visibility of approximately 1200 m or beyond were used for analysis of the CWD encounter rates.

A 15-20m vessel with a flying bridge observation platform about 4 to 5m above water level and unobstructed forward view, and a team of three to four observers were deployed to undertake the surveys. Two observers were on search effort at all times when following the transect lines with a constant speed of 7 to 8 knots (i.e. 13 to 15 km per hour), one using 7X handheld binoculars and the other using unaided eyes and recording data.

During on-effort survey periods, the survey team recorded effort data including time, position (waypoints), weather conditions (Beaufort sea state and visibility) and distance travelled in each

series with assistance of a handheld GPS device. The GPS device also continuously and automatically logged data including time, position (latitude and longitude) and vessel speed throughout the entire survey.

When CWDs were seen, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens), then followed until they were lost from view. At that point, the boat returned (off effort) to the survey line at the closest point after obtaining photo records of the dolphin group and began to survey on effort again.

Focal follows of dolphins would be used for providing supplementary information only where practicable (i.e. when individual dolphins or small stable groups of dolphins with at least one member that could be readily identifiable with unaided eyes during observations and weather conditions are favourable). These would involve the boat following (at an appropriate distance to minimise disturbance) an identifiable individual dolphin for an extended period of time, and collecting detailed data on its location, behaviour, response to vessels, and associates.

6.3.2 Photo Identification

CWDs can be identified by their unique features like presence of scratches, nick marks, cuts, wounds, deformities of their dorsal fin and distinguished colouration and spotting patterns.

When CWDs were observed, the survey team was taken off-effort, the dolphins were approached and photographed for photo-ID information (using a Canon 7D [or similar] camera and long 300 mm+ telephoto lens). The survey team attempted to photograph both sides of every single dolphin in the group as the colouration and spotting pattern on both sides may not be identical. The photos were taken at the highest available resolution and stored on Compact Flash memory cards for transferring into a computer.

All photos taken were initially examined to sort out those containing potentially identifiable individuals. These sorted-out images would then be examined in detail and compared to the CWD photo-identification catalogue established for 3RS Project during the baseline monitoring stage.

6.3.3 Land-based Theodolite Tracking Survey

Land-based theodolite tracking survey obtains fine-scale information on the time of day and movement patterns of the CWDs. A digital theodolite (Sokkia/Sokkisha Model DT5 or similar equipment) with 30-power magnification and 5-s precision was used to obtain the vertical and horizontal angle of each dolphin and vessel position. Angles were converted to geographic coordinates (latitude and longitude) and data were recorded using *Pythagoras* software, Version 1.2. This method delivers precise positions of multiple spatially distant targets in a short period of time. The technique is fully non-invasive, and allows for time and cost-effective descriptions of dolphin habitat use patterns at all times of daylight.

Three surveyors (one theodolite operator, one computer operator, and one observer) were involved in each survey. Observers searched for dolphins using unaided eyes and handheld binoculars (7X50). Theodolite tracking sessions were initiated whenever an individual CWD or group of CWDs was located. Where possible, a distinguishable individual was selected, based on colouration, within the group. The focal individual was then continuously tracked via the theodolite, with a position recorded each time the dolphin surfaced. In case an individual could not be positively distinguished from other members, the group was tracked by recording positions based on a central point within the group whenever the CWD surfaced. Tracking continued until animals were lost from view; moved beyond the range of reliable visibility (>1-3km, depending on station height); or environmental conditions obstructed visibility (e.g., intense haze, Beaufort sea state >4, or sunset), at which time the research effort was terminated. In addition to the tracking

of CWD, all vessels that moved within 2-3km of the station were tracked, with effort made to obtain at least two positions for each vessel.

Theodolite tracking included focal follows of CWD groups and vessels. Priority was given to tracking individual or groups of CWD. The survey team also attempted to track all vessels moving within 1 km of the focal CWD.

6.4 Monitoring Results and Observations

6.4.1 Small Vessel Line-transect Survey

Survey Effort

Within this reporting period, two complete sets of small vessel line-transect surveys were conducted on the 9, 11, 16, 17, 18, 22, 23 and 24 June 2020, covering all transects in NEL, NWL, AW, WL and SWL survey areas for twice.

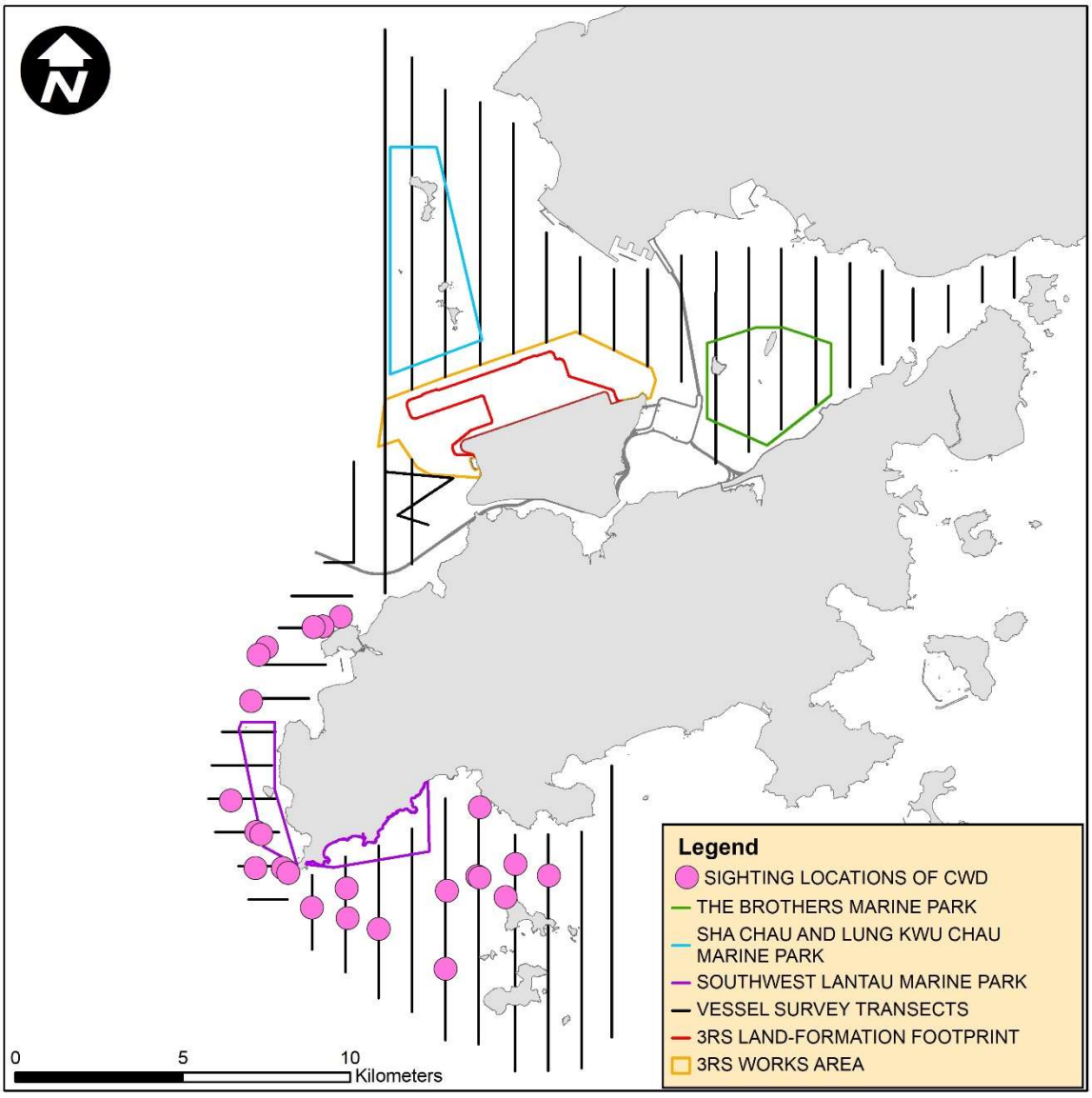
A total of around 439.90 km of survey effort was collected from these surveys and around 93.2% of the survey effort was being conducted under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of the survey effort are given in **Appendix D**.

Sighting Distribution

In June 2020, 24 sightings with 88 dolphins were sighted. All these sightings are on-effort records under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility). Details of cetacean sightings are presented in **Appendix D**.

Distribution of all CWD sightings recorded in June 2020 is illustrated in **Figure 6.3**. In WL, the majority of the CWD sightings were clustered at waters around Tai O and at the waters between Peaked Hill and Fan Lau. In SWL, the majority of the CWD sightings were recorded at the waters between Lantau and the Soko Islands and also at the western part of the survey area. No sightings of CWD were recorded in NEL, NWL or AW survey areas.

Figure 6.3: Sightings Distribution of Chinese White Dolphins



Remarks: (1) Please note that there are 24 pink circles on the map indicating the sighting locations of CWDs. Some of them were very close to each other and therefore may appear overlapped on this distribution map. (2) Marine park excludes land area and the landward boundary generally follows the high water mark along the coastline.

Encounter Rate

Two types of dolphin encounter rates were calculated based on the data from June 2020. They included the number of dolphin sightings per 100 km survey effort (STG) and total number of dolphins per 100 km survey effort (ANI) in the whole survey area (i.e. NEL, NWL, AW, WL and SWL). In the calculation of dolphin encounter rates, only survey data collected under favourable weather condition (i.e. Beaufort Sea State 3 or below with favourable visibility) were used. The formulae used for calculation of the encounter rates are shown below:

Encounter Rate by Number of Dolphin Sightings (STG)

$$STG = \frac{Total\ No.of\ \ On-effort\ Sightings}{Total\ Amount\ of\ Survey\ Effort\ (km)}\ x\ 100$$

Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{Total\ No.of\ Dolphins\ from\ On-effort\ Sightings}{Total\ Amount\ of\ Survey\ Effort\ (km)}\ x\ 100$$

(Notes: Only data collected under Beaufort 3 or below condition were used)

In June 2020, a total of around 409.81 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 24 on-effort sightings with 88 dolphins were sighted under such condition. Calculation of the encounter rates in June 2020 are shown in **Appendix D**.

For the running quarter of the reporting period (i.e., from April 2020 to June 2020), a total of around 1277.35 km of survey effort were conducted under Beaufort Sea State 3 or below with favourable visibility, whilst a total number of 40 on-effort sightings and a total number of 177 dolphins from on-effort sightings were obtained under such condition. Calculation of the running quarterly encounter rates are shown in **Appendix D**.

The STG and ANI of CWD in the whole survey area (i.e. NEL, NWL, AW, WL and SWL) during the month of June 2020 and during the running quarter are presented in **Table 6.4** below and compared with the Action Level. The running quarterly encounter rates STG and ANI remain above the Action Level, thus the Action Level is not triggered.

Table 6.4: Comparison of CWD Encounter Rates of the Whole Survey Area with Action Levels

	Encounter Rate (STG)	Encounter Rate (ANI)
June 2020	5.86	21.47
Running Quarter from April 2020 to June 2020(1)	3.13	13.86
Action Level	Running quarterly(1) STG < 1.86 & ANI < 9.35	

Note: (1) Running quarterly encounter rates STG & ANI were calculated from data collected in the reporting period and the two preceding survey months, i.e. the data from April 2020 to June 2020, containing six sets of transect surveys for all monitoring areas. Action Level will be triggered if both STG and ANI fall below the criteria.

Group Size

In June 2020, 24 groups of 88 dolphins in total were sighted, and the average group size of CWDs was 3.7 dolphins per group. Sightings with medium group size (i.e. 3-9 dolphins) were dominated and accounted for two-thirds of the sightings. There was no records of CWD sighting with large group size (i.e. 10 or more dolphins).

Activities and Association with Fishing Boats

Six sightings of CWDs were recorded engaging in feeding activities in June 2020 and one of them was observed in association with operating gillnetter.

Mother-calf Pair

In June 2020, five CWD sightings were recorded with the presence of mother-and-unspotted juvenile pair.

6.4.2 Photo Identification

In June 2020, a total number of 32 different CWD individuals were identified for totally 41 times. A summary of photo identification works is presented in **Table 6.5**. Representative photos of these individuals are given in **Appendix D**.

Table 6.5: Summary of Photo Identification

Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area	Individual ID	Date of Sighting (dd-mmm-yy)	Sighting Group No.	Area
NLMM011	11-Jun-20	1	WL	WLMM018	22-Jun-20	4	SWL
NLMM015	22-Jun-20	1	SWL	WLMM030	16-Jun-20	2	WL
		2	SWL	WLMM043	11-Jun-20	4	WL
NLMM043	16-Jun-20	1	WL			7	WL
NLMM055	11-Jun-20	5	WL	WLMM062	16-Jun-20	2	WL
NLMM063	22-Jun-20	1	SWL	WLMM073	22-Jun-20	4	SWL
		2	SWL	WLMM081	16-Jun-20	4	WL
SLMM014	18-Jun-20	1	SWL	WLMM082	16-Jun-20	4	WL
		2	SWL	WLMM090	11-Jun-20	7	WL
SLMM025	16-Jun-20	5	WL		16-Jun-20	5	WL
	18-Jun-20	1	SWL	WLMM107	11-Jun-20	5	WL
SLMM028	16-Jun-20	5	WL			6	WL
	18-Jun-20	1	SWL	WLMM109	11-Jun-20	4	WL
SLMM036	11-Jun-20	1	WL	WLMM114	18-Jun-20	2	SWL
SLMM049	18-Jun-20	2	SWL		22-Jun-20	6	SWL
SLMM070	22-Jun-20	3	SWL	WLMM131	18-Jun-20	2	SWL
WLMM003	11-Jun-20	7	WL	WLMM141	11-Jun-20	5	WL
WLMM004	16-Jun-20	5	WL	WLMM142	11-Jun-20	4	WL
WLMM011	22-Jun-20	2	SWL	WLMM149	11-Jun-20	5	WL
WLMM013	16-Jun-20	2	WL	WLMM153	16-Jun-20	2	WL
WLMM015	16-Jun-20	4	WL				

6.4.3 Land-based Theodolite Tracking Survey

Survey Effort

Land-based theodolite tracking surveys were conducted at LKC on 4 June 2020 and at SC on 10 June 2020, with a total of two days of land-based theodolite tracking survey effort accomplished in this reporting period. No CWD group was tracked during the surveys. Information of survey effort and CWD groups are presented in **Table 6.6**. Details of the survey effort are presented in **Appendix D**.

Table 6.6: Summary of Survey Effort and CWD Group of Land-based Theodolite Tracking

Land-based Station	No. of Survey Sessions	Survey Effort (hh:mm)	No. of CWD Groups Sighted	CWD Group Sighting per Survey Hour
Lung Kwu Chau	1	6:00	0	0
Sha Chau	1	6:00	0	0
TOTAL	**2**	**12:00**	**0**	**0**

6.5 Progress Update on Passive Acoustic Monitoring

Underwater acoustic monitoring using Passive Acoustic Monitoring (PAM) should be undertaken during land formation related construction works. In this reporting period, the Ecological Acoustic Recorder (EAR) was remained underwater and positioned at south of Sha Chau Island inside the

SCLKCMP with 20% duty cycle (**Figure 6.5**). The EAR deployment is generally for 6 weeks prior to data retrieval for analysis. Acoustic data is reviewed to give an indication of CWDs occurrence patterns and to obtain anthropogenic noise information simultaneously. Analysis (by a specialised team of acousticians) involved manually browsing through spectrograms of every acoustic recording and logging the occurrence of dolphin signals. All potential dolphin detections will be re-played by computer as well as listened to by human ears for accurate assessment of dolphin group presence. As the period of data collection and analysis takes more than four months, PAM results could not be reported in monthly intervals but report for supplementing the annual CWD monitoring analysis.

6.6 Site Audit for CWD-related Mitigation Measures

During the reporting period, silt curtains were in place by the contractor for marine filling , in which dolphin observers were deployed by contractor in accordance with the MMWP. Overall, 3 to 5 dolphin observation stations and teams of at least two dolphin observers were deployed by the contractors for continuous monitoring of the DEZ for DCM and seawall construction works in accordance with the DEZ Plan. Trainings for the proposed dolphin observers on the implementation of MMWP and DEZ monitoring were provided by the ET prior to the aforementioned works, with a cumulative total of 694 individuals being trained and the training records kept by the ET. From the contractors' MMWP observation records, no dolphin or other marine mammals were observed within or around the silt curtains. As for DEZ monitoring records, no dolphin or other marine mammals were observed within or around the DEZs in this reporting month. These contractors' records were also audited by the ET during site inspection.

Audits of acoustic decoupling measures for construction vessels were carried out during weekly site inspection and the observations are summarised in **Section 7.1**. Audits of SkyPier high speed ferries route diversion and speed control and construction vessel management are presented in **Section 7.2** and **Section 7.3** respectively.

6.7 Timing of Reporting CWD Monitoring Results

Detailed analysis of CWD monitoring results collected by small vessel line-transect survey will be provided in future quarterly reports. Detailed analysis of CWD monitoring results collected by land-based theodolite tracking survey and PAM will be provided in future annual reports after a larger sample size of data has been collected.

6.8 Summary of CWD Monitoring

Monitoring of CWD was conducted with two complete sets of small vessel line-transect surveys and two days of land-based theodolite tracking survey effort as scheduled. The running quarterly encounter rates STG and ANI in the reporting period did not trigger the Action Level for CWD monitoring.

7 Environmental Site Inspection and Audit

7.1 Environmental Site Inspection

Site inspections of the construction works were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures for the Project. The weekly site inspection schedule of the construction works is provided in **Appendix C**. Bi-weekly site inspections were also conducted by the IEC. Besides, *ad-hoc* site inspections were conducted by ET and IEC if environmental problems were identified, or subsequent to receipt of an environmental complaint, or as part of the investigation work. These site inspections provided a direct means to reinforce the specified environmental protection requirements and pollution control measures in construction sites.

During site inspections, environmental situation, status of implementation of pollution control and mitigation measures were observed. Environmental documents and site records, including waste disposal record, maintenance record of environmental equipment, and relevant environmental permit and licences, were also checked on site. Observations were recorded in the site inspection checklist and passed to the contractor together with the recommended mitigation measures where necessary in order to advise contractors on environmental improvement, awareness and on-site enhancement measures. The observations were made with reference to the following information during the site inspections:

- The EIA and EM&A requirements;
- Relevant environmental protection laws, guidelines, and practice notes;
- The EP conditions and other submissions under the EP;
- Monitoring results of EM&A programme;
- Works progress and programme;
- Proposal of individual works;
- Contract specifications on environmental protection; and
- Previous site inspection results.

Good site practices were observed in site inspections during the reporting period. Advice were given when necessary to ensure the construction workforce were familiar with relevant procedures, and to maintain good environmental performance on site. Regular toolbox talks on environmental issues were organised for the construction workforce by the contractors to ensure understanding and proper implementation of environmental protection and pollution control mitigation measures.

Landscape and Visual Mitigation Measures

Implementation of applicable landscape and visual mitigation measures (reference to the environmental protection measures CM1 – CM10 in **Appendix B**) was monitored regularly in accordance with the Manual. No non-conformity was recorded during the reporting period. Based on the latest Contractors' submitted records, a cumulative total of 228 and 8 trees were retained and transplanted. The Contractors' performance on existing trees maintenance and protection measures on retained and transplanted trees were regularly checked by the ET. In case of non-conformity, specific recommendations would be made, and actions will be carried out according to the Event and Action Plan.

Marine Sediment Management

Marine sediment is managed according to the EIA Report, Updated EM&A Manual and the project Waste Management Plan. Sediment sampling and treatment are in progress. Treated sediment is reused as backfilling materials.

Land Contamination Assessment

The Supplementary CAP was submitted to EPD pursuant to EP Condition 2.20. The CAR for Golf Course and T2 Emergency Power Supply System No.1 (Volumes 1 and 2) were submitted to EPD in accordance with EP Condition 1.9 and the Supplementary CAP in which no land contamination issues were identified. The land contamination assessment work of the Emergency Power Supply System Nos. 2, 3 and 4 was on-going in the reporting period.

A summary of implementation status of the environmental mitigation measures for the construction phase of the Project during the reporting period is provided in **Appendix B**.

7.2 Audit of SkyPier High Speed Ferries

The Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier (the SkyPier Plan) was submitted to the Advisory Council on the Environment for comment and subsequently submitted to and approved by EPD in November 2015 under EP Condition 2.10. The approved SkyPier Plan is available on the dedicated website of the Project. In the SkyPier Plan, AAHK has committed to implement the mitigation measure of requiring HSFs of SkyPier travelling between HKIA and Zhuhai / Macau to start diverting the route with associated speed control across the area, i.e. Speed Control Zone (SCZ), with high CWD abundance. The route diversion and speed restriction at the SCZ have been implemented since 28 December 2015.

Due to the COVID-19 pandemic, all SkyPier HSF services have been suspended from 25 March 2020 until further notice. Special ferry service between Macau and Hong Kong International Airport was arranged from 17 June 2020 to 16 July 2020. Key audit findings for the SkyPier HSFs travelling to/from Macau against the requirements of the SkyPier Plan during the reporting period are summarised in **Table 7.1**. The daily movements of all SkyPier HSFs in this reporting period (i.e., 0 to 4 daily movements) were within the maximum daily cap of 125 daily movements. Status of compliance with the annual daily average of 99 movements will be further reviewed in the annual EM&A Report.

In total, 56 ferry movements between HKIA SkyPier and Macau were recorded in June 2020 and the data are presented in **Appendix H**. The time spent by the SkyPier HSFs travelling through the SCZ in June 2020 were presented in **Figure 7.1**. It will take 9.6 minutes to travel through the SCZ when the SkyPier HSFs adopt the maximum allowable speed of 15 knots within the SCZ. **Figure 7.1** shows that all of the SkyPier HSFs spent more than 9.6 minutes to travel through the SCZ.

Figure 7.1: Duration of the SkyPier HSFs travelling through the SCZ for June 2020

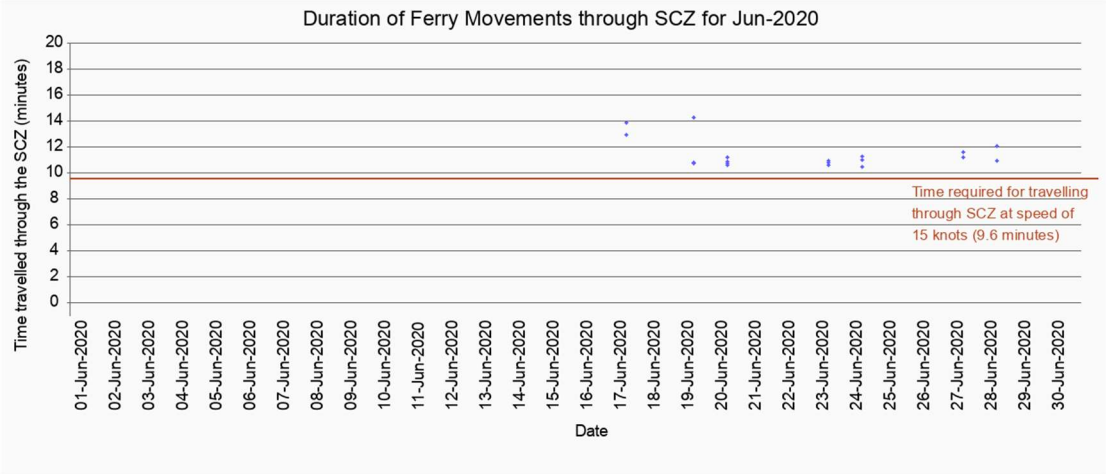


Table 7.1: Summary of Key Audit Findings against the SkyPier Plan

Requirements in the SkyPier Plan	1 to 30 June 2020
Total number of ferry movements recorded and audited	56
Use diverted route and enter / leave SCZ through Gate Access Points	0 deviation
Speed control in speed control zone	The average speeds of all HSFs travelling through the SCZ ranged from 9.9 to 13.3 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. The time used by HSFs to travel through SCZ is presented in **Figure 7.1**.
Daily Cap (including all SkyPier HSFs)	0-4 daily movement (within the maximum daily cap - 125 daily movements).

7.3 Audit of Construction and Associated Vessels

The updated Marine Travel Routes and Management Plan for Construction and Associated Vessel (MTRMP-CAV) was submitted and approved in November 2016 by EPD under EP Condition 2.9. The approved Plan is available on the dedicated website of the Project.

ET carried out the following actions during the reporting period:

- Two skipper training sessions were held for contractors' concerned skippers of relevant construction vessels to familiarize them with the predefined routes; general education on local cetaceans; guidelines for avoiding adverse water quality impact; the required environmental practices / measures while operating construction and associated vessels under the Project; and guidelines for operating vessels safely in the presence of CWDs. The list of all trained skippers was properly recorded and maintained by ET.
- Nine skipper training sessions were held by contractors' Environmental Officers. Competency tests were subsequently conducted with the trained skippers by ET. The list of all trained skippers was properly recorded and maintained by ET.
- In this reporting period, 4 skippers were trained by ET and 44 skippers were trained by contractors' Environmental Officers. In total, 1562 skippers were trained from August 2016 to June 2020.

- The MSS automatically recorded deviation cases such as speeding, entering no entry zone and not travelling through the designated gate. ET conducted checking to ensure the MSS records deviation cases accurately.
- Deviations such as speeding in the works area, entered no entry zone, and entering from non-designated gates were identified. All the concerned contractors were reminded to comply with the requirements of the MTRMP-CAV during the bi-weekly MTCC audit.
- Three-month rolling programmes (one month record and three months forecast) for construction vessel activities were received from the contractors in order to help maintain the number of construction and associated vessels on site to a practicable minimal level.

7.4 Implementation of Dolphin Exclusion Zone

The DEZ Plan was submitted in accordance with EP Condition 3.1 (v) requirement and Section 10.3 of the Manual, and approved in April 2016 by EPD. The 24-hour DEZs with a 250m radius for marine works were established and implemented by the contractors for DCM works and seawall construction according to their Method Statement for DEZ Monitoring that followed the specifications and requirements of the DEZ Plan.

During the reporting period, ET was notified that no dolphin sightings were recorded within the DEZ by the contractors. The ET checked the dolphin sighting record and relevant records by the contractors to audit the implementation of DEZ.

7.5 Status of Submissions under Environmental Permits

The current status of submissions under the EP up to the reporting period is presented in **Table 7.2**.

Table 7.2: Status of Submissions under Environmental Permit

EP Condition	Submission	Status
2.1	Complaint Management Plan	Accepted / approved by EPD
2.4	Management Organizations	
2.5	Construction Works Schedule and Location Plans	
2.7	Marine Park Proposal	
2.8	Marine Ecology Conservation Plan	
2.9	Marine Travel Routes and Management Plan for Construction and Associated Vessels	
2.10	Marine Travel Routes and Management Plan for High Speed Ferries of SkyPier	
2.11	Marine Mammal Watching Plan	
2.12	Coral Translocation Plan	
2.13	Fisheries Management Plan	
2.14	Egretry Survey Plan	
2.15	Silt Curtain Deployment Plan	
2.16	Spill Response Plan	
2.17	Detailed Plan on Deep Cement Mixing	
2.18	Landscape & Visual Plan	Submitted to EPD
2.19	Waste Management Plan	Accepted / approved by EPD
2.20	Supplementary Contamination Assessment Plan	
3.1	Updated EM&A Manual	
3.4	Baseline Monitoring Reports	

7.6 Compliance with Other Statutory Environmental Requirements

During the reporting period, environmental related licenses and permits required for the construction activities were checked. No non-compliance with environmental statutory requirements was recorded. The environmental licenses and permits which are valid in the reporting period are presented in **Appendix F**.

7.7 Analysis and Interpretation of Complaints, Notification of Summons and Status of Prosecutions

7.7.1 Complaints

No construction activities-related complaint was received during the reporting period.

7.7.2 Notifications of Summons or Status of Prosecution

Neither notification of summons nor prosecution was received during the reporting period.

7.7.3 Cumulative Statistics

Cumulative statistics on complaints, notifications of summons and status of prosecutions are summarised in **Appendix G**.

8 Future Key Issues and Other EIA & EM&A Issues

8.1 Construction Programme for the Coming Reporting Period

Key activities anticipated in the next reporting period for the Project will include the following:

Reclamation Works:

Contract 3205 DCM works

- DCM works

Contract 3206 Main Reclamation Works

- Land-based ground improvement works;
- Seawall construction;
- Marine filling; and
- Sorting and reuse of inert waste from other 3RS contracts.

Airfield Works:

Contract 3301 North Runway Crossover Taxiway

- Cable ducting works; and
- Subgrade compaction and paving works.

Contract 3302 Eastern Vehicular Tunnel Advance Works

- Cable laying and ducting works;
- Trench excavation works;
- Backfilling and reinstatement works
- Piling and structure works;
- King Post Construction; and
- Site establishment.

Contract 3303 Third Runway and Associated Works

- Plant and equipment mobilisation;
- Footing and utilities work;
- Preparation works for box culvert construction;
- Bored pilling work; and
- Site establishment.

Contract 3307 Fire Training Facility

- Site establishment

Third Runway Concourse:

Contract 3402 New Integrated Airport Centres Enabling Works

- Potable water and seawater works;
- Road works; and

- Sewerage and pipe works.

Contract 3403 New Integrated Airport Centres Building and Civil Works

- Site establishment; and
- Foundation works.

Contract 3405 Third Runway Concourse Foundation and Substructure Works

- Plant mobilisation;
- Bored pilling work; and
- Site establishment.

Terminal 2 Expansion:

Contract 3503 Terminal 2 Foundation and Substructure Works

- T2 re-configuration;
- Excavation works;
- Utilities, drainage, and road work; and
- Piling and structure works.

Automated People Mover (APM) and Baggage Handling System (BHS):

Contract 3601 New Automated People Mover System (TRC Line)

- Construction of site office.

Contract 3602 Existing APM System Modification Works

- Modification works at APM depot.

Construction Support (Facilities):

Contract 3721 Construction Support Infrastructure Works

- Excavation and backfilling; and
- Laying of drainage pipes and dusts.

Contract 3722 Construction Support Facilities

- Formboard erecting and concreting;
- Superstructure; and
- Site Establishment.

Airport Support Infrastructure:

Contract 3801 APM and BHS Tunnels on Existing Airport Island

- Construction of temporary traffic steel deck;
- Cofferdam installation for box culvert;
- King Post;
- Backfilling work; and
- Site clearance.

Contract 3802 APM and BHS Tunnels and Related Works

- Site establishment.

Construction Support (Services / Licenses):

Contract 3901A/ B Concrete Batching Facility

- Excavation work;
- Foundation work;

- Footing construction; and
- Erection of steelwork.

8.2 Key Environmental Issues for the Coming Reporting Period

The key environmental issues for the Project in the coming reporting period expected to be associated with the construction activities include:

- Generation of dust from construction works and stockpiles;
- Noise from operating equipment and machinery on-site;
- Generation of site surface runoffs and wastewater from activities on-site;
- Water quality from DCM works and marine filling;
- DEZ monitoring for ground improvement works (DCM works) and seawall construction;
- Implementation of MMWP for silt curtain deployment;
- Sorting, recycling, storage and disposal of general refuse and construction waste;
- Reuse of treated marine sediments from piling and excavation works;
- Management of chemicals and avoidance of oil spillage on-site; and
- Acoustic decoupling measures for equipment on marine vessels.

The implementation of required mitigation measures by the contractors will be monitored by the ET.

8.3 Monitoring Schedule for the Coming Reporting Period

A tentative schedule of the planned environmental monitoring work in the next reporting period is provided in **Appendix C**.

8.4 Review of the Key Assumptions Adopted in the EIA Report

With reference to Appendix E of the Manual, it is noted that the key assumptions adopted in approved EIA report for the construction phase are still valid and no major changes are involved. The environmental mitigation measures recommended in the approved EIA Report remain applicable and shall be implemented in undertaking construction works for the Project.

9 Conclusion and Recommendation

The key activities of the Project carried out in the reporting period included reclamation works and land-based works. Works in the reclamation areas included DCM works, marine filling, seawall and facilities construction, together with runway and associated works. Land-based works on existing airport island involved mainly airfield works, foundation and substructure work for Terminal 2 expansion, modification and tunnel work for APM and BHS systems, and preparation work for utilities, with activities include site establishment, site office construction, road and drainage works, cable ducting, demolition of existing facilities, piling, and excavation works.

All the monitoring works for construction dust, construction noise, water quality, construction waste, landscape & visual, and CWD were conducted during the reporting period in accordance with the Manual.

Monitoring results of construction dust, construction noise, construction waste, and CWD did not trigger the corresponding Action and Limit Levels during the reporting period.

The water quality monitoring results for all parameters, except DO, obtained during the reporting period were within the corresponding Action and Limit Levels stipulated in the EM&A programme. Relevant investigations and follow-up actions will be conducted according to the EM&A programme if the corresponding Action and Limit Levels are triggered. For DO, some of the testing results triggered the relevant Action and Limit Levels between 11 and 25 June 2020, and the corresponding investigations were conducted accordingly. There were no abnormal observations regarding construction activities during the water quality monitoring between 11 and 25 June 2020. Contractors were reminded to review construction activities and contractor's mitigation measures were found in place during site inspections by ET. The measured DO levels complied with the corresponding Action and Limit Levels after 25 June 2020. Additional monitoring was conducted in the vicinity of the affected IM stations for further investigation and the results were being analysed together with the construction activities being undertaken during water quality monitoring. Further investigation findings will be reported in the next Monthly EM&A Report.

Weekly site inspections of the construction works were carried out by the ET to audit the implementation of proper environmental pollution control and mitigation measures for the Project. Bi-weekly site inspections were also conducted by the IEC. Site inspection findings were recorded in the site inspection checklists and provided to the contractors to follow up.

Due to the COVID-19 pandemic, all SkyPier HSF services have been suspended from 25 March 2020 until further notice. Special ferry service between Macau and Hong Kong International Airport was arranged from 17 June 2020 to 16 July 2020. The daily movements of all SkyPier HSFs in this reporting period were in the range of 0 to 4 daily movements, which are within the maximum daily cap of 125 daily movements. A total of 56 HSF movements under the SkyPier Plan were recorded in the reporting period. The average speeds of all HSFs travelling through the SCZ ranged from 9.9 to 13.3 knots. All HSFs had travelled through the SCZ with average speeds under 15 knots in compliance with the SkyPier Plan. In summary, the ET and IEC have audited the HSF movements against the SkyPier Plan and conducted follow up investigations or actions accordingly.

On the implementation of MTRMP-CAV, the MSS automatically recorded the deviation case such as speeding, entering no entry zone and not travelling through the designated gates. ET conducted checking to ensure the MSS records all deviation cases accurately. Training has been

provided for the concerned skippers to facilitate them in familiarising with the requirements of the MTRMP-CAV. Deviations including speeding in the works area, entered no entry zone, and entry from non-designated gates were reviewed by ET. All the concerned captains were reminded by the contractor's MTCC representative to comply with the requirements of the MTRMP-CAV. The ET reminded contractors that all vessels shall avoid entering the no-entry zone, in particular the Brothers Marine Park and the Sha Chau & Lung Kwu Chau Marine Park. Three-month rolling programmes for construction vessel activities, which ensures the proposed vessels are necessary and minimal through good planning, were also received from contractors.

Figures

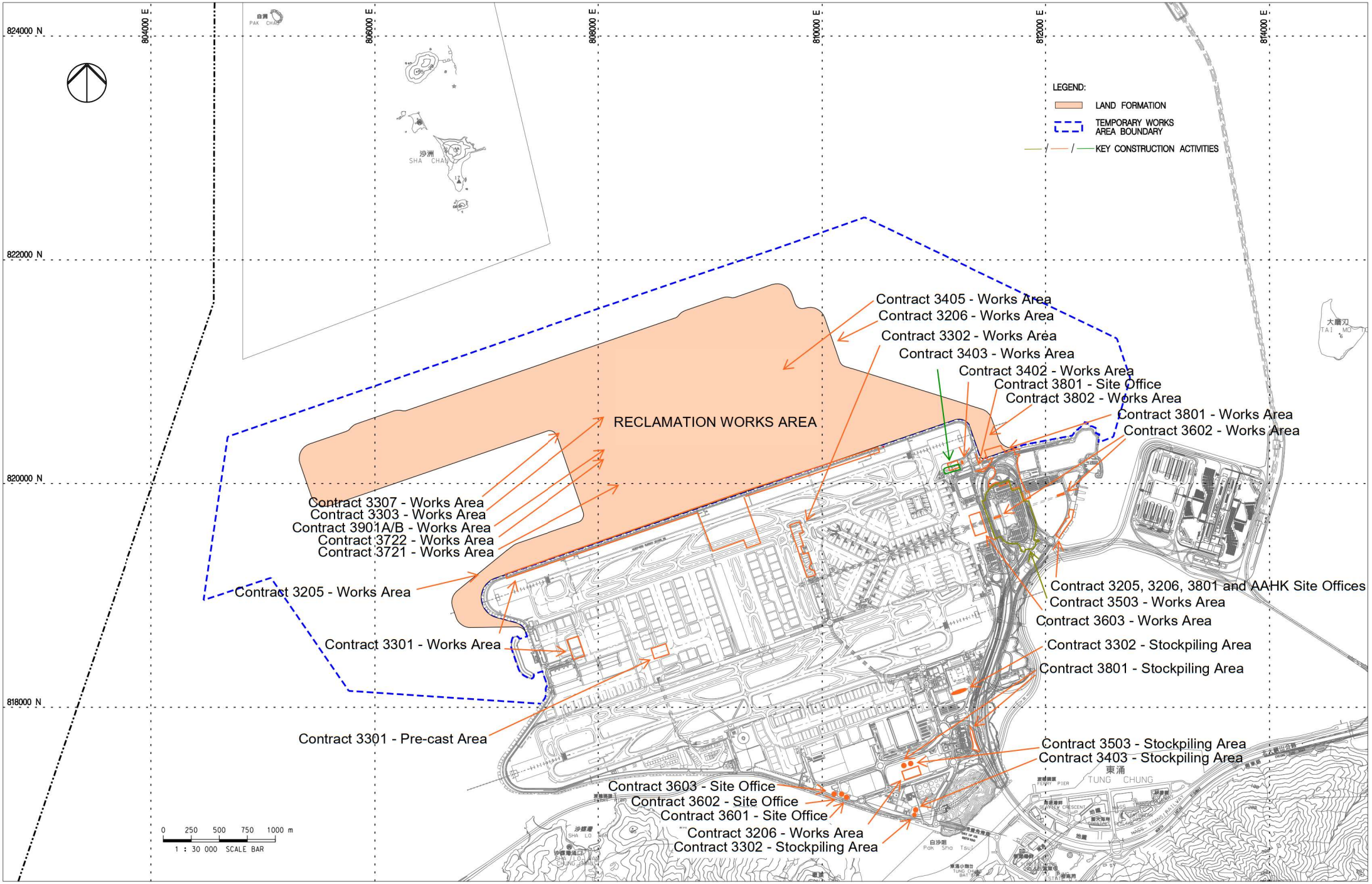
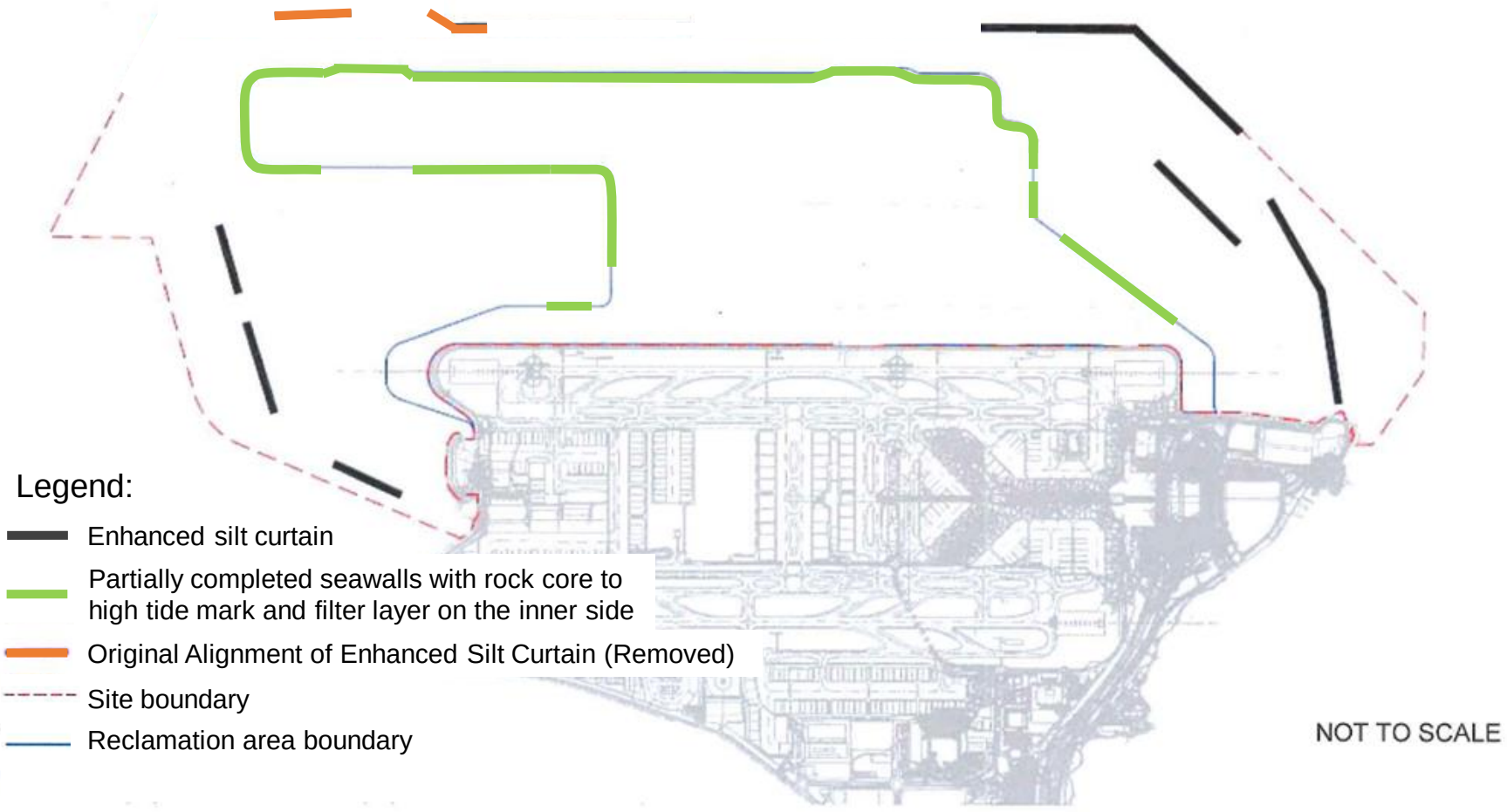


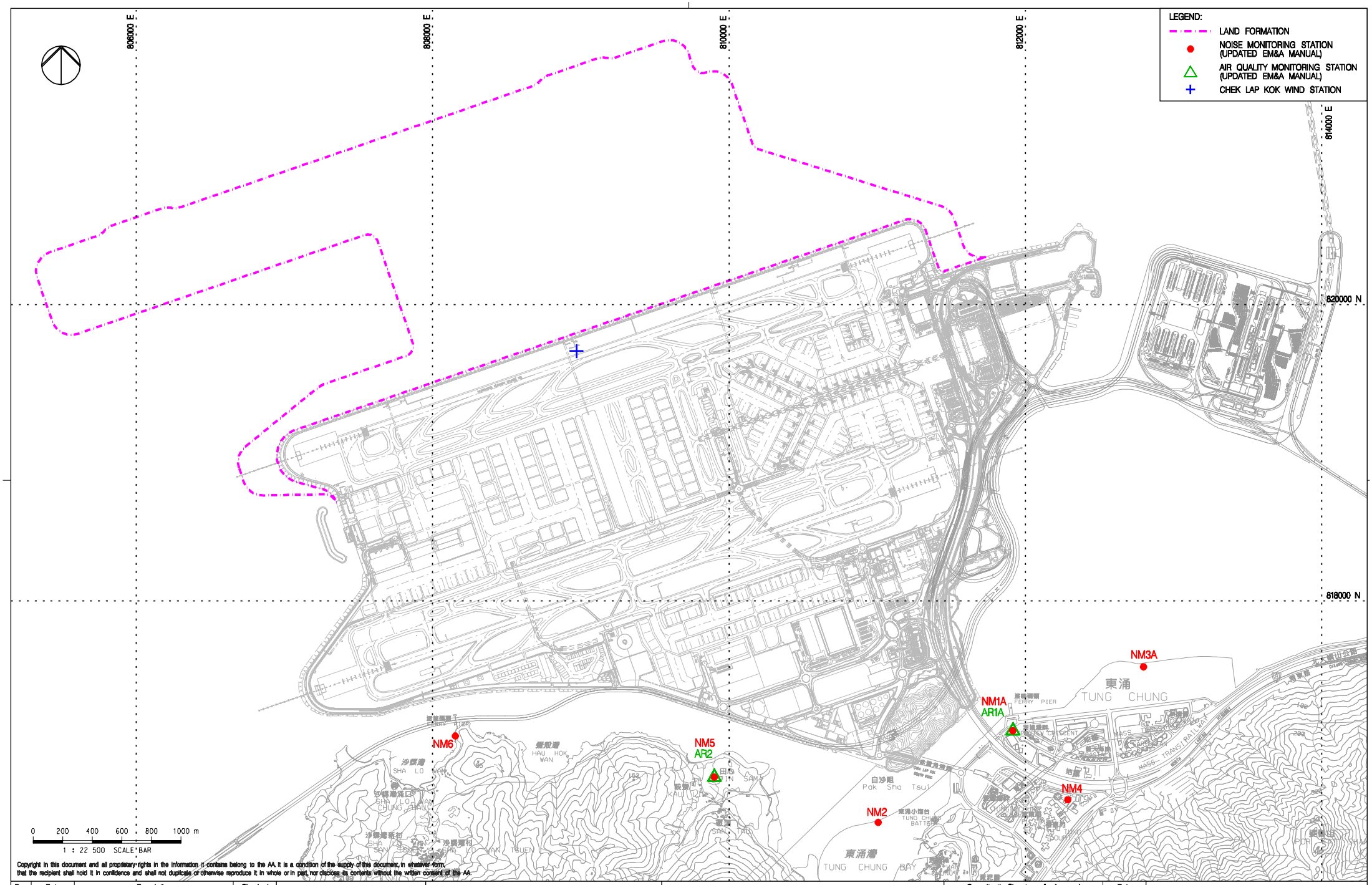
FIGURE 1.1 LOCATIONS OF KEY CONSTRUCTION ACTIVITIES

Note: The locations are for indicative purpose. The actual construction work locations are in accordnace with the construction work programme.

Figure 1.2

Latest Layout of the Enhanced Silt Curtain





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A	06JAN16	FIRST ISSUE	RO
B	29JAN16	GENERAL REVISION	RO
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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATIONS OF AIR AND NOISE MONITORING STATIONS AND CHEK LAP KOK WIND STATION

Consultant's Signatures for Approval		Date
Design	TK	29OCT18
Checkers	TK	29OCT18
Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

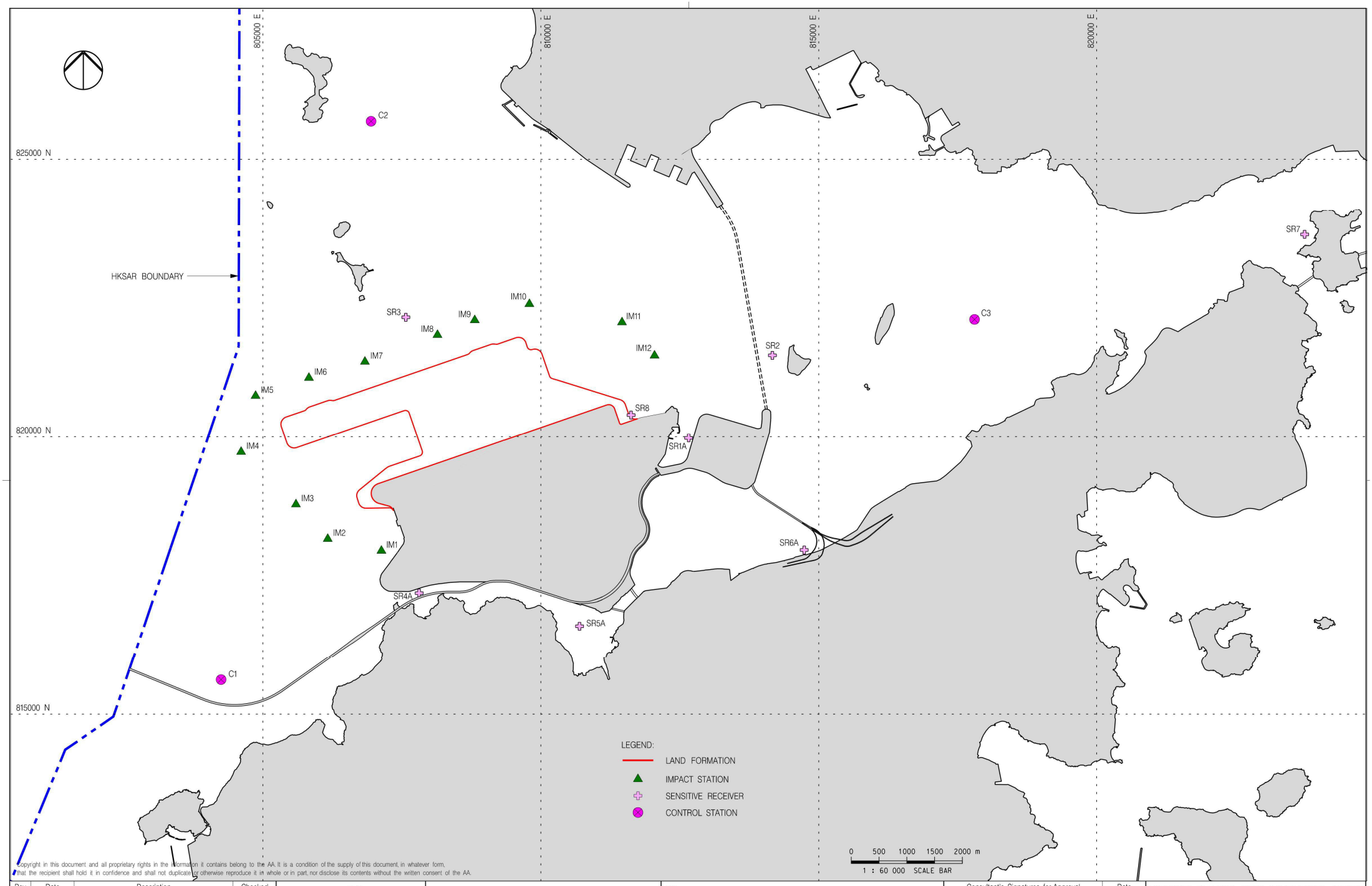
Drawing No.

FIGURE 2.1

Scale at A3 1 : 22500

Rev. D

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.1.dgn



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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

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WATER QUALITY MONITORING STATIONS

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EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

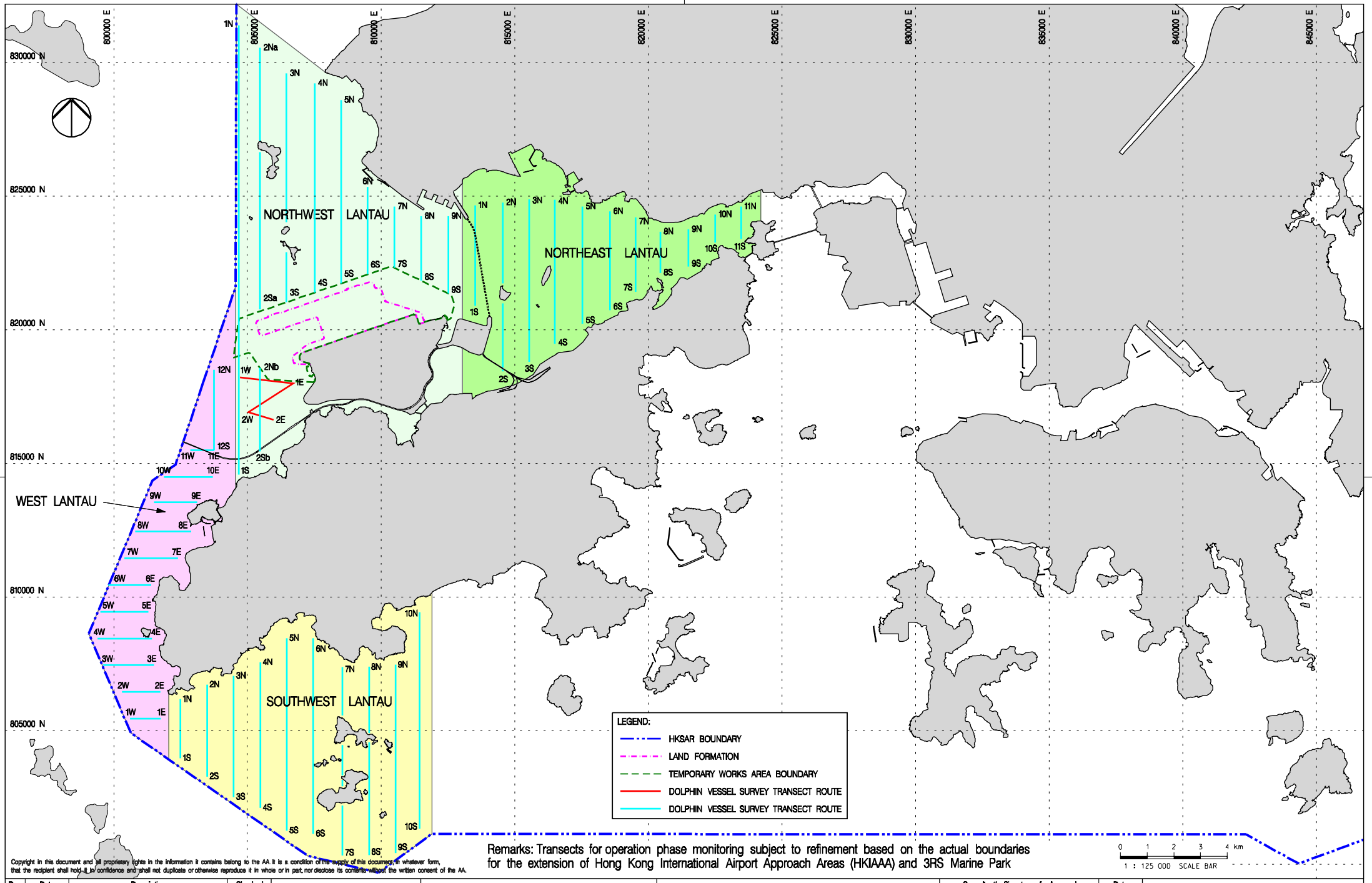
Drawing No.

FIGURE 4.1

Scale at A3 1 : 60000

Rev. A

Filename: J:\355482\REPORT\ENV\EMA\190821\FIG 4.1.dgn



Remarks: Transects for operation phase monitoring subject to refinement based on the actual boundaries for the extension of Hong Kong International Airport Approach Areas (HKIAAA) and 3RS Marine Park

Rev.	Date	Description	Checked
B	27JUL16	GENERAL REVISION	JT
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F	04APR19	GENERAL REVISION	SH

香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

VESSEL BASED DOLPHIN MONITORING TRANSECTS IN CONSTRUCTION, POST-CONSTRUCTION AND OPERATION PHASES

Consultant's Signatures for Approval		Date
Design	JC	04APR19
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EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

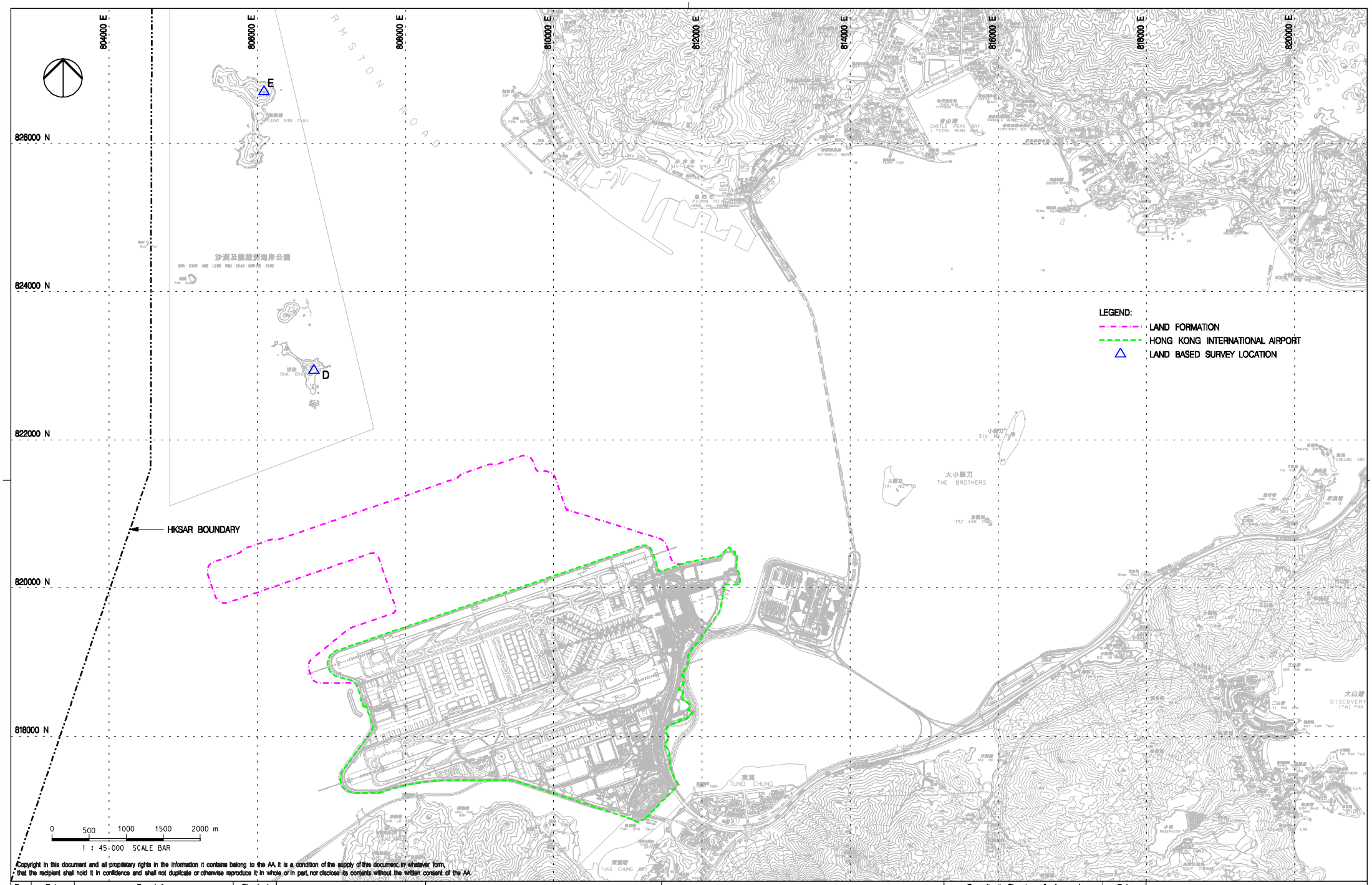
Drawing No.

FIGURE 6.1

Scale at A3 1 : 125000

Rev. F

Filename: J:\355482\REPORT\ENV\EMA\190404\FIG 6.1.dgn



Rev.	Date	Description	Checked
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香港國際機場 HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LAND BASED DOLPHIN MONITORING IN BASELINE AND CONSTRUCTION PHASES

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Approver	EC	29OCT18

EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

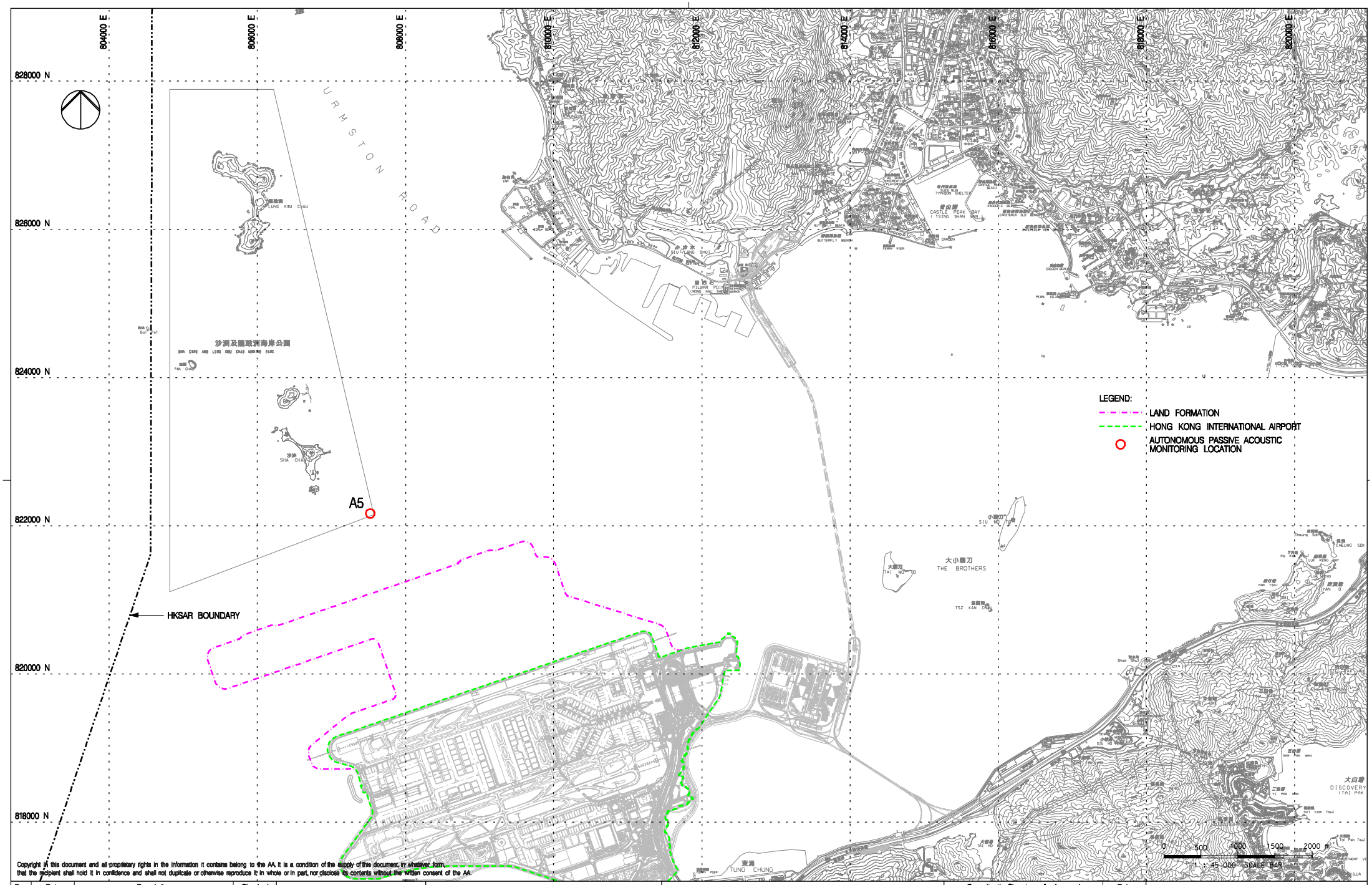
Drawing No.

FIGURE 6.2

Scale at A3 1 : 45000

Rev. C

Filename: J:\355482\REPORT\ENV\EMA\181029\FIG 2.5.dgn



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香港國際機場 | HONG KONG INTERNATIONAL AIRPORT

MOTT MACDONALD

Title

LOCATION FOR AUTONOMOUS PASSIVE ACOUSTIC MONITORING

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EXPANSION OF HONG KONG INTERNATIONAL AIRPORT INTO A THREE-RUNWAY SYSTEM

Drawing No.

FIGURE 6.5

Scale at A3 1 : 45000

Rev. C

Filename: J:\355482\REPORT\EN\EMA\181029\FIG 2.11.dgn

Appendix A. Contract Description

Contract Description

Contract No.	Contract Title	Contractor	Key Construction Activities
3205	Deep Cement Mixing (Package 5)	Bachy Soletanche- Sambo Joint Venture	The works covered by the Contract 3205 comprise ground improvement of seabed using Deep Cement Mixing (DCM) method, the major construction activities including without limitation the following • Geophysical surveys; • Supply and placing of geotextile and sand blanket under seawalls; • Supply, maintenance, installation and removal of silt curtain systems; • Preliminary construction trails; • Supply and installation of DCM clusters within the works areas; and • Coring, sampling and testing of DCM treated soils and reporting works.
3206	Reclamation Contract	Zhen Hua Engineering Company Ltd.-China Communications Construction Company Ltd.-CCCC Dredging (Group) Company Ltd. Joint Venture	The works covered by the Contract 3206 comprise the formation of approximately 650 hectares of land north of the existing airport island for the project, the major construction activities including without limitation the following • Geotechnical and ground improvement works; • Seawall construction; • Marine and land filling works; and • Civil works.
3301	North Runway Crossover Taxiway	Fujita Corporation-China Harbour Engineering Company Ltd.-Zhen Hua Engineering Company Ltd. Joint Venture	The works covered by the Contract 3301 comprise the construction of a new dual taxiway across the existing north runway and utility services and cable ducting systems. The major construction activities include without limitation the following: • Construction of a new dual taxiway; • Cable ducting works; • Extension of existing portable water supply system; and • All associated works.
3302	Eastern Vehicular Tunnel Advance Works	China Road and Bridge Corporation	The works covered by the Contract 3302 comprise the design and construction of the first section of the new Eastern Vehicular Tunnel and a Road Tunnel Plant Building. The major construction activities include without limitation the following:

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Foundation and structural works; • Cast-in / Underground electrical & mechanical works and utility services; and • All associated testing and commissioning works.
3303	Third Runway and Associated Works	Sinohydro Corporation Limited, Powerchina Airport Construction Company Limited, Paul Y. Construction Company Limited, and Rock-One Engineering Company Limited Joint Venture	The works covered by the Contract 3303 comprise all elements of permanent works and temporary works required for the completion, commissioning and operation of the new North Runway and existing South Runway following the closure of the existing North Runway. The major construction activities include without limitation the following: • New runway, taxiways, and associated works; • Infrastructure works; • Construction of ancillary buildings and facilities; • Set up of various airport systems; and • All associated testing and commissioning works.
3307	Fire Training Facility	Paul Y. Construction Company Limited	The works covered by the Contract 3307 comprise the construction of a Fire Training Facility on the new reclamation area to replace the existing facility at the Airport Island. The major construction activities include without limitation the following: • Building services works; • Civil works; and • All associated testing and temporary works.
3402	New Integrated Airport Centers Enabling Works	Wing Hing Construction Co., Ltd.	The works covered by the Contract 3402 comprise the enabling works for the new Integrated Airport Centers. The major construction activities include without limitation the following: • Site clearance and demolition; • Building services works; • Utilities diversion and installation works; • Roadworks including associated facilities; and • All associated testing and commissioning works.
3403	New Integrated Airport Centres – Building and Civil Works	Sun Fook Kong Construction Limited	The works covered by the Contract 3403 comprise the construction of a new Integrated Airport Centre (IAC) and a number of ancillary facilities and Additions and Alteration (A&A) works for converting the existing IAC into a back-up IAC, including without limitation the following:

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Site clearance and demolition; • Building structure and envelope; • Building Services and Airport Systems; and • Utilities division and installations.
3405	Third Runway Concourse Foundation and Substructure Works	China Road and Bridge Corporation - Bachy Soletanche Group Limited - LT Sambo Co., Ltd. Joint Venture	The works covered by the Contract 3405 comprise without limitation the following: • Piled foundation works; • Basement and tunnel structure works; • Associated internal reinforced concrete structures; • Backfilling and compaction of works area; and • Associated testing and temporary works.
3503	Terminal 2 Foundation and Substructure Works	Leighton - Chun Wo Joint Venture	The works covered by the Contract 3503 comprise the foundations for the new T2 terminal, two annex buildings and associated viaducts, construction of the new T2 basement and south annex building structures, diaphragm walls, utility services and other advance works. The major construction activities include without limitation the following: • Re-configuration and demolition of existing utilities and structures; • Pile foundations for the expanded T2 Terminal Building, South Annex Building, and North Annex Building; • Construction of new South Annex Building; • Diversion and provisions of utilities; and • All associated testing and commissioning works.
3601	New Automated People Mover System (TRC Line)	CRRC Puzhen Bombardier Transportation Systems Limited and CRRC Nanjing Puzhen Co., Ltd. Joint Venture	The works covered by the Contract 3601 comprise the initial phase of the Automated People Mover (APM) system connecting the Third Runway Concourse (TRC) and the APM Interchange Station in the modified T2, and extension of the new APM system into the new APM Depot east of T2. The major construction activities include without limitation the following: • New 3-guideway APM system between TRC and T2; • Extension of the TRC Line into the new APM Depot; • APM associated sub-systems (communications, signalling, etc.) • Associated civil works; and • All associated testing, commissioning works.

Contract No.	Contract Title	Contractor	Key Construction Activities
3602	Existing APM System Modification Works	Niigata Transys Co., Ltd.	The works covered by the Contract 3602 comprise the detailed design, supply, manufacture, fabrication, implementation, testing and commissioning of the following modification works of the existing APM systems: • Modification of existing APM depot and APM cars; • Modification of existing T1 & T2 tunnels; and • Preparation of new APM depot.
3603	3RS Baggage Handling System	Vanderlande Industries Hong Kong Limited and Shun Hing Systems Integration Company Limited	The works covered by the Contract 3603 comprise the design, supply, manufacture, delivery, installation, testing and commissioning of the high-speed baggage handling system.
3721	Construction Support Infrastructure Works	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3721 comprise the construction of the infrastructure works and building facilities on the reclaimed land formation. The major construction activities include without limitation the following: • Project site road; • Utilities; • Cargo loading quays; and • Security fencing and hoarding.
3722	Western Support Area – Construction Support Facilities	Tapbo Construction Company Limited and Konwo Modular House Limited Joint Venture	The works covered by the Contract 3722 comprise the design and construction of support facilities, including site office, Canteen, Safety Induction Centre and Medical Centre, Material Testing Laboratories and Typhoon Shelter, Vehicle Maintenance Facility and Fuel Storage Facility. The major construction activities include without limitation the following: • Construction of support facilities; • Foundation and structural works; and • Building services works.
3801	APM and BHS Tunnels on Existing Airport Island	China State Construction Engineering (Hong Kong) Limited	The works covered by the Contract 3801 comprise the construction of the APM and Baggage Handling System (BHS) tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM and BHS tunnels; • Construction of ventilation building and associated infrastructure; and • Construction, testing and commissioning of sewerage pumping station; and

Contract No.	Contract Title	Contractor	Key Construction Activities
			• Civil and structural engineering works.
3802	APM and BHS Tunnels and Related Works	Gammon Construction Limited	The works covered by the Contract 3802 comprise the construction of the APM and BHS tunnels on existing airport island. The major construction activities include without limitation the following: • Construction of APM/ BHS Tunnels; • Construction of ancillary buildings/ facilities; • Building services and airport systems; • Infrastructure Works; • Underground utilities and services; and • All associated testing and commissioning works.
3901A	Concrete Batching Facility	K. Wah Concrete Company Limited	The works covered by the Contract 3901A comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following: • Supply of all equipment for the installation of the Facility to the Site; and • Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.
3901B	Concrete Batching Facility	Gammon Construction Limited	The works covered by the Contract 3901B comprise the establishment, operation and maintenance of a concrete batching facility at the Project Site and the supply of concrete products. The major construction activities include without limitation the following: • Supply of all equipment for the installation of the Facility to the Site; and • Supply of all raw materials required for the production of ready mixed concrete products and the continual operation of the Facility.

Appendix B. Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

Environmental Mitigation Implementation Schedule (EMIS) for Construction Phase

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Air Quality Impact – Construction Phase		
5.2.6.2	2.1	-	**Dust Control Measures** ▪ Water spraying for 12 times a day or once every two hours for 24-hour working at all active works area.	Within construction site / Duration of the construction phase	I
5.2.6.3	2.1	-	▪ Covering of at least 80% of the stockpiling area by impervious sheets. Water spraying of all dusty materials immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling.	Within construction site / Duration of the construction phase	I
5.2.6.4	2.1	-	Dust control practices as stipulated in the Air Pollution Control (Construction Dust) Regulation should be adopted. These practices include: Good Site Management ▪ Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain high standard of housekeeping to prevent emission of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning.	Within construction site / Duration of the construction phase	I
			Disturbed Parts of the Roads ▪ Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or ▪ Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Within construction site / Duration of the construction phase	I
			Exposed Earth ▪ Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies.	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Loading, Unloading or Transfer of Dusty Materials ▪ All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet.	Within construction site / Duration of the construction phase	I
			Debris Handling ▪ Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides; and ▪ Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped.	Within construction site / Duration of the construction phase	I
			Transport of Dusty Materials ▪ Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards.	Within construction site / Duration of the construction phase	I
			Wheel washing ▪ Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels.	Within construction site / Duration of the construction phase	I
			Use of vehicles ▪ The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site; ▪ Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels; and ▪ Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle.	Within construction site / Duration of the construction phase	I
			Site hoarding ▪ Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.	Within construction site / Duration of the construction phase	I
5.2.6.5	2.1	-	**Best Practices for Concrete Batching Plant** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Cement Works (Concrete Batching Plant) BPM 3/2 as well as in the future Specified Process licence should be adopted. The best practices are recommended to be applied to both the land based and floating concrete batching plants. Best practices include: Cement and other dusty materials	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The loading, unloading, handling, transfer or storage of cement, pulverised fuel ash (PFA) and/or other equally dusty materials shall be carried in a totally enclosed system acceptable to EPD. All dust-laden air or waste gas generated by the process operations shall be properly extracted and vented to fabric filtering system to meet the required emission limit; ▪ Cement, PFA and/or other equally dusty materials shall be stored in storage silo fitted with audible high level alarms to warn of over-filling. The high-level alarm indicators shall be interlocked with the material filling line such that in the event of the silo approaching an overfilling condition, an audible alarm will operate, and after 1 minute or less the material filling line will be closed; ▪ Vents of all silos shall be fitted with fabric filtering system to meet the required emission limit; ▪ Vents of cement/PFA weighing scale shall be fitted with fabric filtering system to meet the required emission limit; and ▪ Seating of pressure relief valves of all silos shall be checked, and the valves re-seated if necessary, before each delivery.		
			Other raw materials ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rock, sand, stone aggregate, shall be carried out in such a manner to prevent or minimize dust emissions; ▪ The materials shall be adequately wetted prior to and during the loading, unloading and handling operations. Manual or automatic water spraying system shall be provided at all unloading areas, stock piles and material discharge points; ▪ All receiving hoppers for unloading relevant materials shall be enclosed on three sides up to 3 m above the unloading point. In no case shall these hoppers be used as the material storage devices; ▪ The belt conveyor for handling materials shall be enclosed on top and two sides with a metal board at the bottom to eliminate any dust emission due to wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can achieve same performance; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passage of conveyors shall be fitted with adequate flexible seals; ▪ Scrapers shall be provided at the turning points of all conveyors to remove dust adhered to the belt surface; ▪ Conveyors discharged to stockpiles of relevant materials shall be arranged to minimize free fall as far as practicable. All free falling transfer points from conveyors to stockpiles shall be enclosed with chute(s) and water sprayed; ▪ Aggregates with a nominal size less than or equal to 5 mm should be stored in totally enclosed structure such as storage bin and should not be handled in open area. Where there is sufficient buffer area surrounding the concrete batching plant, ground stockpiling may be used;	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side; ▪ Aggregates with a nominal size greater than 5 mm should preferably be stored in a totally enclosed structure. If open stockpiling is used, the stockpile shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; and ▪ The opening between the storage bin and weighing scale of the materials shall be fully enclosed.		
			Loading of materials for batching ▪ Concrete truck shall be loaded in such a way as to minimise airborne dust emissions. The following control measures shall be implemented: (a) Pre-mixing the materials in a totally enclosed concrete mixer before loading the materials into the concrete truck is recommended. All dust-laden air generated by the pre-mixing process as well as the loading process shall be totally vented to fabric filtering system to meet the required emission limit; and (b) If truck mixing batching or other types of batching method is used, effective dust control measures acceptable to EPD shall be adopted. The dust control measures must have been demonstrated to EPD that they are capable to collect and vent all dust-laden air generated by the material loading/mixing to dust arrestment plant to meet the required emission limit. ▪ The loading bay shall be totally enclosed during the loading process.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Vehicles ▪ All practicable measures shall be taken to prevent or minimize the dust emission caused by vehicle movement; and ▪ All access and route roads within the premises shall be paved and adequately wetted.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Housekeeping ▪ A high standard of housekeeping shall be maintained. All spillages or deposits of materials on ground, support structures or roofs shall be cleaned up promptly by a cleaning method acceptable to EPD. Any dumping of materials at open area shall be prohibited.	Within Concrete Batching Plant / Duration of the construction phase	N/A
5.2.6.6	2.1	-	**Best Practices for Asphaltic Concrete Plant** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Tar and Bitumen Works (Asphaltic Concrete Plant) BPM 15 (94) as well as in the future Specified Process licence should be adopted. These include: Design of Chimney ▪ The chimney shall not be less than 3 metres plus the building height or 8 metres above ground level, whichever is the greater; ▪ The efflux velocity of gases from the main chimney shall not be less than 12 m/s at full load condition;	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ The flue gas exit temperature shall not be less than the acid dew point; and ▪ Release of the chimney shall be directed vertically upwards and not be restricted or deflected.		
			Cold feed side ▪ The aggregates with a nominal size less than or equal to 5 mm shall be stored in totally enclosed structure such as storage bin and shall not be handled in open area; ▪ Where there is sufficient buffer area surrounding the plant, ground stockpiling may be used. The stockpile shall be enclosed at least on top and three sides and with flexible curtain to cover the entrance side. If these aggregates are stored above the feeding hopper, they shall be enclosed at least on top and three sides and be wetted on the surface to prevent wind-whipping; ▪ The aggregates with a nominal size greater than 5 mm should preferably be stored in totally enclosed structure. Aggregates stockpile that is above the feeding hopper shall be enclosed at least on top and three sides. If open stockpiling is used, the stockpiles shall be enclosed on three sides with the enclosure wall sufficiently higher than the top of the stockpile to prevent wind whipping; ▪ Belt conveyors shall be enclosed on top and two sides and provided with a metal board at the bottom to eliminate any dust emission due to the wind-whipping effect. Other type of enclosure will also be accepted by EPD if it can be demonstrated that the proposed enclosure can be achieve the same performance; ▪ Scrapers shall be provided at the turning points of all belt conveyors inside the chute of the transfer points to remove dust adhered to the belt surface; ▪ All conveyor transfer points shall be totally enclosed. Openings for the passages of conveyors shall be fitted with adequate flexible seals; and ▪ All materials returned from dust collection system shall be transferred in enclosed system and shall be stored inside bins or enclosures.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Hot feed side ▪ The inlet and outlet of the rotary dryer shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter. The particulate and gaseous concentration at the exhaust outlet of the dust collector shall not exceed the required limiting values; ▪ The bucket elevator shall be totally enclosed and the air be extracted and ducted to a dust collection system to meet the required particulates limiting value; ▪ All vibratory screens shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings; ▪ Chutes for carrying hot material shall be rigid and preferably fitted with abrasion resistant plate inside. They shall be inspected daily for leakages;	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ All hot bins shall be totally enclosed and dust tight with close-fitted access inspection opening. Gaskets shall be installed to seal off any cracks and edges of any inspection openings. The air shall be extracted and ducted to a dust collection system to meet the required particulates limiting value; and ▪ Appropriate control measures shall be adopted in order to meet the required bitumen emission limit as well as the ambient odour level (2 odour units).		
			Material transportation ▪ The loading, unloading, handling, transfer or storage of other raw materials which may generate airborne dust emissions such as crushed rocks, sands, stone aggregates, reject fines, shall be carried out in such a manner as to minimize dust emissions; ▪ Roadways from the entrance of the plant to the product loading points and/or any other working areas where there are regular movements of vehicles shall be paved or hard surfaced; and ▪ Haul roads inside the Works shall be adequately wetted with water and/or chemical suppressants by water trucks or water sprayers.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Control of emissions from bitumen decanting ▪ The heating temperature of the particular bitumen type and grade shall not exceed the corresponding temperature limit of the same type listed in Appendix 1 of the Guidance Note; ▪ Tamper-free high temperature cut-off device shall be provided to shut off the fuel supply or electricity in case the upper limit for bitumen temperature is reached; ▪ Proper chimney for the discharge of bitumen fumes shall be provided at high level; ▪ The emission of bitumen fumes shall not exceed the required emission limit; and The air-to-fuel ratio shall be properly controlled to allow complete combustion of the fuel. The fuel burners, if any, shall be maintained properly and free from carbon deposits in the burner nozzles.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Liquid fuel ▪ The receipt, handling and storage of liquid fuel shall be carried out so as to prevent the release of emissions of organic vapours and/or other noxious and offensive emissions to the air.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Housekeeping ▪ A high standard of housekeeping shall be maintained. Waste material, spillage and scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared frequently. The minimum clearing frequency is on a weekly basis.	Within Concrete Batching Plant / Duration of the construction phase	N/A
5.2.6.7	2.1	-	**Best Practices for Rock Crushing Plants** The relevant best practices for dust control as stipulated in the Guidance Note on the Best Practicable Means for Mineral Works (Stone Crushing Plant) BPM 11/1 (95) as well as in the future Specified Process licence should be adopted. These include:	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Crushers ▪ The outlet of all primary crushers, and both inlet and outlet of all secondary and tertiary crushers, if not installed inside a reasonably dust tight housing, shall be enclosed and ducted to a dust extraction and collection system such as a fabric filter; ▪ The inlet hopper of the primary crushers shall be enclosed on top and 3 sides to contain the emissions during dumping of rocks from trucks. The rock while still on the trucks shall be wetted before dumping; ▪ Water sprayers shall be installed and operated in strategic locations at the feeding inlet of crushers; and ▪ Crusher enclosures shall be rigid and be fitted with self-closing doors and close-fitting entrances and exits. Where conveyors pass through the crusher enclosures, flexible covers shall be installed at entries and exits of the conveyors to the enclosure.		
			Vibratory screens and grizzlies ▪ All vibratory screens shall be totally enclosed in a housing. Screenhouses shall be rigid and reasonably dust tight with self-closing doors or close-fitted entrances and exits for access. Where conveyors pass through the screenhouse, flexible covers shall be installed at entries and exits of the conveyors to the housing. Where containment of dust within the screenhouse structure is not successful then a dust extraction and collection system shall be provided; and ▪ All grizzlies shall be enclosed on top and 3 sides and sufficient water sprayers shall be installed at their feeding and outlet areas.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Belt conveyors ▪ Except for those conveyors which are placed within a totally enclosed structure such as a screenhouse or those erected at the ground level, all conveyors shall be totally enclosed with windshield on top and 2 sides; ▪ Effective belt scraper such as the pre-cleaner blades made by hard wearing materials and provided with pneumatic tensioner, or equivalent device, shall be installed at the head pulley of designated conveyor as required to dislodge fine dust particles that may adhere to the belt surface and to reduce carry-back of fine materials on the return belt. Bottom plates shall also be provided for the conveyor unless it has been demonstrated that the corresponding belt scraper is effective and well maintained to prevent falling material from the return belt; and ▪ Except for those transfer points which are placed within a totally enclosed structure such as a screenhouse, all transfer points to and from conveyors shall be enclosed. Where containment of dust within the enclosure is not successful, then water sprayers shall be provided. Openings for any enclosed structure for the passage of conveyors shall be fitted with flexible seals.	Within Concrete Batching Plant / Duration of the construction phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Storage piles and bins ▪ Where practicable, free falling transfer points from conveyors to stockpiles shall be fitted with flexible curtains or be enclosed with chutes designed to minimize the drop height. Water sprays shall also be used where required. ▪ The surface of all surge piles and stockpiles of blasted rocks or aggregates shall be kept sufficiently wet by water spraying wherever practicable; ▪ All open stockpiles for aggregates of size in excess of 5 mm shall be kept sufficiently wet by water spraying where practicable; or ▪ The stockpiles of aggregates 5 mm in size or less shall be enclosed on 3 sides or suitably located to minimize wind-whipping. Save for fluctuations in stock or production, the average stockpile shall stay within the enclosure walls and in no case the height of the stockpile shall exceed twice the height of the enclosure walls. ▪ Scattered piles gathered beneath belt conveyors, inside and around enclosures shall be cleared regularly.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Rock drilling equipment ▪ Appropriate dust control equipment such as a dust extraction and collection system shall be used during rock drilling activities.	Within Concrete Batching Plant / Duration of the construction phase	N/A
			Hazard to Human Life – Construction Phase		
Table 6.40	3.2	-	▪ Precautionary measures should be established to request barges to move away during typhoons.	Construction Site / Construction Period	I
Table 6.40	3.2	-	▪ An appropriate marine traffic management system should be established to minimize risk of ship collision.	Construction Site / Construction Period	I
Table 6.40	3.2	-	▪ Location of all existing hydrant networks should be clearly identified prior to any construction works.	Construction Site / Construction Period	I
			Noise Impact – Construction Phase		
7.5.6	4.3	-	**Good Site Practice** Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction: ▪ only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; ▪ machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum;	Within the Project site / During construction phase / Prior to commencement of operation	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; ▪ mobile plant should be sited as far away from NSRs as possible; and ▪ material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site construction activities.		
7.5.6	4.3	-	**Adoption of QPME** ▪ QPME should be adopted as far as applicable.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	**Use of Movable Noise Barriers** ▪ Movable noise barriers should be placed along the active works area and mobile plants to block the direct line of sight between PME and the NSRs.	Within the Project site / During construction phase / Prior to commencement of operation	I
7.5.6	4.3	-	**Use of Noise Enclosure/ Acoustic Shed** ▪ Noise enclosure or acoustic shed should be used to cover stationary PME such as air compressor and generator.	Within the Project site / During construction phase / Prior to commencement of operation	I
			Water Quality Impact – Construction Phase		

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
8.8.1.2 and 8.8.1.3	5.1	2.26	**Marine Construction Activities** <u>General Measures to be Applied to All Works Areas</u> ▪ Barges or hoppers shall not be filled to a level which will cause overflow of materials or pollution of water during loading or transportation; ▪ Use of Lean Material Overboard (LMOB) systems shall be prohibited; ▪ Excess materials shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessels are moved; ▪ Plants should not be operated with leaking pipes and any pipe leakages shall be repaired quickly; ▪ Adequate freeboard shall be maintained on barges to reduce the likelihood of decks being washed by wave action; ▪ All vessels shall be sized such that adequate clearance is maintained between vessels and the sea bed at all states of the tide to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; ▪ The works shall not cause foam, oil, grease, litter or other objectionable matter to be present in the water within and adjacent to the works site; and ▪ For ground improvement activities including DCM, the wash water from cleaning of the drilling shaft should be appropriately treated before discharge. The Contractor should ensure the waste water meets the WPCO/TM requirements before discharge. No direct discharge of contaminated water is permitted.	Within construction site / Duration of the construction phase	I
			<u>Specific Measures to be Applied to All Works Areas</u> ▪ The daily maximum production rates shall not exceed those assumed in the water quality assessment in the EIA report; ▪ A maximum of 10 % fines content to be adopted for sand blanket and 20 % fines content for marine filling below +2.5 mPD prior to substantial completion of seawall (until end of Year 2017) shall be specified in the works contract document;	Within construction site / Duration of the construction phase	I
			▪ An advance seawall of at least 200m to be constructed (comprising either rows of contiguous permanent steel cells completed above high tide mark or partially completed seawalls with rock core to high tide mark and filter layer on the inner side) prior to commencement of marine filling activities;		I
			▪ Closed grab dredger shall be used to excavate marine sediment; ▪ Silt curtains surrounding the closed grab dredger shall be deployed in accordance with the Silt Curtain Deployment Plan; and		N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The Silt Curtain Deployment Plan shall be implemented.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Specific Measures to be Applied to Land Formation Activities prior to Commencement of Marine Filling Works ▪ Double layer 'Type III' silt curtains to be applied around the active eastern works areas prior to commencement of sand blanket laying activities. The silt curtains shall be configured to minimise SS release during ebb tides. A silt curtain efficiency test shall be conducted to validate the performance of the silt curtains;	Within construction site / Duration of the construction phase	N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to enclose WSRs C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of construction; and		For C7a, I For C8, I *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The silt curtains and silt screens should be regularly checked and maintained.		I
			Specific Measures to be Applied to Land Formation Activities during Marine Filling Works ▪ Double layer 'Type II' or 'Type III' silt curtains to be applied around the eastern openings between partially completed seawalls prior to commencement of marine filling activities. The silt curtains shall be configured to minimise SS release during ebb tides;	Within construction site / Duration of the construction phase	I *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtains to be applied at the south-western opening prior to commencement of marine filling activities;		N/A *(The arrangement of silt curtain has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ Double layer silt curtain to enclose WSR C7a and silt screens installed at the intake points for both WSR C7a and C8 prior to commencement of marine filling activities; and		N/A *(The requirement of silt curtain / screen has been modified. The details can be referred to Silt Curtain Deployment Plan)
			▪ The silt curtains and silt screens should be regularly checked and maintained.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			Specific Measures to be Applied to the Field Joint Excavation Works for the Submarine Cable Diversion ▪ Only closed grabs designed and maintained to avoid spillage shall be used and should seal tightly when operated. Excavated materials shall be disposed at designated marine disposal area in accordance with the Dumping at Sea Ordinance (DASO) permit conditions; and ▪ Silt curtains surrounding the closed grab dredger to be deployed as a precautionary measure.	Within construction site / Duration of the construction phase	N/A
8.8.1.4	5.1	-	**Modification of the Existing Seawall** ▪ Silt curtains shall be deployed around the seawall modification activities to completely enclose the active works areas, and care should be taken to avoid splashing of rockfill / rock armour into the surrounding marine environment. For the connecting sections with the existing outfalls, works for these connection areas should be undertaken during the dry season in order that individual drainage culvert cells may be isolated for interconnection works.	At the existing northern seawall / Duration of the construction phase	N/A
8.8.1.5	5.1	-	**Construction of New Stormwater Outfalls and Modifications to Existing Outfalls** ▪ During operation of the temporary drainage channel, runoff control measures such as bunding or silt fence shall be provided on both sides of the channel to prevent accumulation and release of SS via the temporary channel. Measures should also be taken to minimise the ingress of site drainage into the culvert excavations.	Within construction site / Duration of the construction phase	N/A
8.8.1.6 8.8.1.7	5.1	2.27	**Piling Activities for Construction of New Runway Approach Lights and HKIAAA Marker Beacons** Silt curtains shall be deployed around the piling activities to completely enclose the piling works and care should be taken to avoid spillage of excavated materials into the surrounding marine environment. For construction of the eastern approach lights at the CMPs ▪ Ground improvement via DCM using a close-spaced layout shall be completed prior to commencement of piling works; ▪ Steel casings shall be installed to enclose the excavation area prior to commencement of excavation; ▪ The excavated materials shall be removed using a closed grab within the steel casings; ▪ No discharge of the cement mixed materials into the marine environment will be allowed; and ▪ Excavated materials shall be treated and reused on-site.	Within construction site / Duration of the construction phase	N/A
8.8.1.8	5.1	-	**Construction of Site Runoff and Drainage** The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended: ▪ Install perimeter cut-off drains to direct off-site water around the site and implement internal drainage, erosion and sedimentation control facilities. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site	Within construction site / Duration of the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			drainage system should be undertaken by the Contractors prior to the commencement of construction (for works areas located on the existing Airport island) or as soon as the new land is completed (for works areas located on the new landform);		
			▪ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM-DSS standards under the WPCO. The design of efficient silt removal facilities should make reference to the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction;		I
			▪ All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly;		I
			▪ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities;		I
			▪ In the event that contaminated groundwater is identified at excavation areas, this should be treated on-site using a suitable wastewater treatment process. The effluent should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge to foul sewers or collected for proper disposal off-site. No direct discharge of contaminated groundwater is permitted; and		N/A
			▪ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exits. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. All washwater should be treated according to the requirements of the TM-DSS standards under the WPCO prior to discharge.		I
8.8.1.9	5.1	-	**Sewage Effluent from Construction Workforce** ▪ Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be responsible for appropriate disposal and maintenance.	Within construction site / During construction phase	I
8.8.1.10 8.8.1.11	5.1		**General Construction Activities** ▪ Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used; and	Within construction site / During construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event.		
8.8.1.12 8.8.1.13	5.1	2.28	**Drilling Activities for the Submarine Aviation Fuel Pipelines** To prevent potential water quality impacts at Sha Chau, the following measures shall be applied: ▪ A 'zero-discharge' policy shall be applied for all activities to be conducted at Sha Chau; ▪ No bulk storage of chemicals shall be permitted; and ▪ A containment pit shall be constructed around the drill holes. This containment pit shall be lined with impermeable lining and bunded on the outside to prevent inflow from off-site areas.	Within construction site / During construction phase	I
			At the airport island side of the drilling works, the following measures shall be applied for treatment of wastewater: ▪ During pipe cleaning, appropriate desilting or sedimentation device should be provided on site for treatment before discharge. The Contractor should ensure discharge water from the sedimentation tank meet the WPCO/TM requirements before discharge; and ▪ Drilling fluid used in drilling activities should be reconditioned and reused as far as possible. Temporary enclosed storage locations should be provided on-site for any unused chemicals that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.	Within construction site / During construction phase	I
			Waste Management Implication – Construction Phase		
10.5.1.1	7.1	-	Opportunities to minimise waste generation and maximise the reuse of waste materials generated by the project have been incorporated where possible into the planning, design and construction stages, and the following measures have been recommended: ▪ The relevant construction methods (particularly for the tunnel works) and construction programme have been carefully planned and developed to minimise the extent of excavation and to maximise the on-site reuse of inert C&D materials generated by the project as far as practicable. Temporary stockpiling areas will also be provided to facilitate on-site reuse of inert C&D materials;	Project Site Area / During design and construction phase	I
			▪ Priority should be given to collect and reuse suitable inert C&D materials generated from other concurrent projects and the Government's PFRF as fill materials for the proposed land formation works;		I
			▪ Only non-dredged ground improvement methods should be adopted in order to completely avoid the need for dredging and disposal of marine sediment for the proposed land formation work;		I
			▪ Excavation work for constructing the APM tunnels, BHS tunnels and airside tunnels will not be down to the CMPs beneath the fill materials in order to avoid excavating any sediments; and		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ For the marine sediments expected to be excavated from the piling works of TRC, APM & BHS tunnels, airside tunnels and other facilities on the proposed land formation area, piling work of marine sections of the approach lights and HKIAAA beacons, basement works for some of T2 expansion area and excavation works for the proposed APM depot should be treated and reused on-site as backfilling materials, although required treatment level / detail and the specific re-use mode are under development.		I
10.5.1.1	7.1	-	The following good site practices should be performed during the construction activities include: ▪ Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; ▪ Training of site personnel in proper waste management and chemical waste handling procedures; ▪ Provision of sufficient waste disposal points and regular collection for disposal; ▪ Appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks by tarpaulin/ similar material or by transporting wastes in enclosed containers. The cover should be extended over the edges of the sides and tailboards; ▪ Stockpiles of C&D materials should be kept wet or covered by impervious sheets to avoid wind-blown dust; ▪ All dusty materials including C&D materials should be sprayed with water immediately prior to any loading transfer operation so as to keep the dusty material wet during material handling at the barging points/ stockpile areas; ▪ C&D materials to be delivered to and from the project site by barges or by trucks should be kept wet or covered to avoid wind-blown dust; ▪ The speed of the trucks including dump trucks carrying C&D or waste materials within the site should be controlled to about 10 km/hour in order to reduce the adverse dust impact and secure the safe movement around the site; and ▪ To avoid or minimise dust emission during transport of C&D or waste materials within the site, each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials. Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road surface wet.	Project Site Area / Construction Phase	I
10.5.1.3	7.1	-	The following practices should be performed to achieve waste reduction include: ▪ Use of steel or aluminium formworks and falseworks for temporary works as far as practicable; ▪ Adoption of repetitive design to allow reuse of formworks as far as practicable; ▪ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;	Project Site Area / Construction Phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force; ▪ Any unused chemicals or those with remaining functional capacity should be collected for reused as far as practicable; ▪ Proper storage and site practices to minimise the potential for damage or contamination of construction materials; and ▪ Plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.		
10.5.1.5	7.1		▪ Inert and non-inert C&D materials should be handled and stored separately to avoid mixing the two types of materials.	Project Site Area / Construction Phase	I
10.5.1.5	7.1	-	▪ Any recyclable materials should be segregated from the non-inert C&D materials for collection by reputable licensed recyclers whereas the non-recyclable waste materials should be disposed of at the designated landfill site by a reputable licensed waste collector.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	-	▪ A trip-ticket system promulgated shall be developed in order to monitor the off-site delivery of surplus inert C&D materials that could not be reused on-site for the proposed land formation work at the PFRF and to control fly tipping.	Project Site Area / Construction Phase	I
10.5.1.6	7.1	2.32	▪ The Contractor should prepare and implement a Waste Management Plan detailing various waste arising and waste management practices.	Construction Phase	I
10.5.1.16	7.1	-	The following mitigation measures are recommended during excavation and treatment of the sediments: ▪ On-site remediation should be carried out in an enclosed area in order to minimise odour/dust emissions;	Project Site Area / Construction Phase	I
			▪ The loading, unloading, handling, transfer or storage of treated and untreated sediment should be carried out in such a manner to prevent or minimise dust emissions;		I
			▪ All practical measures, including but not limited to speed control for vehicles, should be taken to minimise dust emission;		I
			▪ Good housekeeping should be maintained at all times at the sediment treatment facility and storage area;		I
			▪ Treated and untreated sediment should be clearly separated and stored separately; and		I
			▪ Surface runoff from the enclosed area should be properly collected and stored separately, and then properly treated to levels in compliance with the relevant effluent standards as required by the Water Pollution Control Ordinance before final discharge.		I
10.5.1.18	7.1	-	The marine sediments to be removed from the cable field joint area would be disposed of at the designated disposal sites to be allocated by the MFC. The following mitigation measures should be strictly	Project Site Area / Construction Phase	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			followed to minimise potential impacts on water quality during transportation of the sediments requiring Type 1 disposal: ▪ Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material; ▪ Monitoring of the barge loading shall be conducted to ensure that loss of material does not take place during transportation. Transport barges or vessels shall be equipped with automatic self-monitoring devices as specified by EPD; and ▪ Barges or hopper barges shall not be filled to a level that would cause the overflow of materials or sediment laden water during loading or transportation.		
10.5.1.19	7.1	-	Contractor should register with the EPD as a chemical waste producer and to follow the relevant guidelines. The following measures should be implemented: ▪ Good quality containers compatible with the chemical wastes should be used; ▪ Incompatible chemicals should be stored separately; ▪ Appropriate labels must be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.; and ▪ The contractor will use a licensed collector to transport and dispose of the chemical wastes at the approved Chemical Waste Treatment Centre or other licensed recycling facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Project Site Area / Construction Phase	I
10.5.1.20	7.1	-	▪ General refuse should be stored in enclosed bins or compaction units separated from inert C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site for disposal at designated landfill sites. An enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	Project Site Area / Construction Phase	I
10.5.1.21	7.1	-	▪ The construction contractors will be required to regularly check and clean any refuse trapped or accumulated along the newly constructed seawall. Such refuse will then be stored and disposed of together with the general refuse.	Project Site Area / Construction Phase	I
			Land Contamination – Construction Phase		
11.10.1.2 to 11.10.1.3	8.1	2.32	For areas inaccessible during site reconnaissance survey ▪ Further site reconnaissance would be conducted once the areas are accessible in order to identify any land contamination concern for the areas.	Project Site Area inaccessible during site reconnaissance / Prior to Construction Phase	I
			▪ Subject to further site reconnaissance findings, a supplementary Contamination Assessment Plan (CAP) for additional site investigation (SI) (if necessary) may be prepared and submitted to EPD for endorsement prior to the commencement of SI at these areas.		I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ After completion of SI, the Contamination Assessment Report (CAR) will be prepared and submitted to EPD for approval prior to start of the proposed construction works at the golf course, the underground and above-ground fuel storage tank areas, emergency power generation units, airside petrol filling station and fuel tank room.		I *(CAR for golf course and Terminal 2 Emergency Power Supply System No.1)
			▪ Should remediation be required, Remediation Action Plan (RAP) and Remediation Report (RR) will be prepared for EPD's approval prior to commencement of the proposed remediation and any construction works respectively.		N/A
11.8.1.2	8.1	-	If contaminated soil is identified, the following mitigation measures are for the excavation and transportation of contaminated materials (if any): ▪ To minimize the incidents of construction workers coming in contact with any contaminated materials, bulk earth-moving excavation equipment should be employed; ▪ Contact with contaminated materials can be minimised by wearing appropriate clothing and personal protective equipment such as gloves and masks (especially when working directly with contaminated material), provision of washing facilities and prohibition of smoking and eating on site; ▪ Stockpiling of contaminated excavated materials on site should be avoided as far as possible; ▪ The use of any contaminated soil for landscaping purpose should be avoided unless pre-treatment was carried out; ▪ Vehicles containing any excavated materials should be suitably covered to reduce dust emissions and/or release of contaminated wastewater; ▪ Truck bodies and tailgates should be sealed to prevent any discharge; ▪ Only licensed waste haulers should be used to collect and transport contaminated material to treatment/disposal site and should be equipped with tracking system to avoid fly tipping; ▪ Speed control for trucks carrying contaminated materials should be exercised. 8km/h is the recommended speed limit; ▪ Strictly observe all relevant regulations in relation to waste handling, such as Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 354) and obtain all necessary permits where required; and ▪ Maintain records of waste generation and disposal quantities and disposal arrangements.	Project Site Area / Construction Phase	N/A
			Terrestrial Ecological – Construction Phase		
12.10.1.1	9.2	2.14	**Pre-construction Egretry Survey** ▪ Conduct ecological survey for Sha Chau egretry to update the latest boundary of the egretry.	Breeding season (April - July) prior to commencement of	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				HDD drilling works at HKIA	
12.7.2.3 and 12.7.2.6	9.1	2.30	**Avoidance and Minimisation of Direct Impact to Egretry** ▪ The daylighting location will avoid direct encroachment to the Sheung Sha Chau egretry. The daylighting location and mooring of flat top barge, if required, will be kept away from the egretry; ▪ In any event, controls such as demarcation of construction site boundary and confining the lighting within the site will be practised to minimise disturbance to off-site habitat at Sheung Sha Chau Island; and ▪ The containment pit at the daylighting location shall be covered or camouflaged.	During construction phase at Sheung Sha Chau Island	I
12.7.2.5	9.1	2.30	**Preservation of Nesting Vegetation** ▪ The proposed daylighting location and the arrangement of connecting pipeline will avoid the need of tree cutting, therefore the trees that are used by ardeids for nesting will be preserved.	During construction phase at Sheung Sha Chau Island	I
12.7.2.4 and 12.7.2.6	9.1	2.30	**Timing the Pipe Connection Works outside Ardeid's Breeding Season** ▪ All HDD and related construction works on Sheung Sha Chau Island will be scheduled outside the ardeids' breeding season (between April and July). No night-time construction work will be allowed on Sheung Sha Chau Island during all seasons.	During construction phase at Sheung Sha Chau Island	I
12.10.1.1	9.3	-	**Ecological Monitoring** ▪ During the HDD construction works period from August to March, ecological monitoring will be undertaken monthly at the HDD daylighting location on Sheung Sha Chau Island to identify and evaluate any impacts with appropriate actions taken as required to address and minimise any adverse impact found.	at Sheung Sha Chau Island	I
			Marine Ecological Impact – Pre-construction Phase		
13.11.4.1	10.2.2	-	▪ Pre-construction phase Coral Dive Survey.	HKIAAA artificial seawall	I
			Marine Ecological Impact – Construction Phase		
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase to completion of construction	I
13.11.1.7 to 13.11.1.10	-	2.31	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on CWDs, fisheries and the marine environment;		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway;		N/A
			▪ Avoid bored piling during CWD peak calving season (Mar to Jun);		I
			▪ Prohibition of underwater percussive piling; and		I
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of submarine cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
13.11.2.1 to 13.11.2.7	-	-	**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		N/A
			Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to the CWDs and other marine ecological resources.		I
13.11.1.12	-	-	**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.	All works area during the construction phase	I
13.11.1.13	-	-	**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
13.11.1.3 to 13.11.1.6	-	-	**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for marine resources, especially the CWD population.	Land formation footprint / during detailed design phase to completion of construction	I
13.11.5.4 to 13.11.5.13	10.3.1	-	**SkyPier High Speed Ferries' Speed Restrictions and Route Diversions** ▪ SkyPier HSFs operating to / from Zhuhai and Macau would divert north of SCLKC Marine Park with a 15 knot speed limit to apply for the part-journeys that cross high CWD abundance grid squares as indicatively shown in **Drawing No. MCL/P132/EIA/13-023** of the EIA Report. Both the alignment of the northerly route and the portion of routings to be subject to the speed limit of 15 knots shall be finalised prior to commencement of construction based on the future review of up-to-date CWD abundance and EM&A data and taking reference to changes in total SkyPier HSF numbers; and ▪ A maximum of 10 knots will be enforced through the designated SCLKC Marine Park area at all times.	Area between the footprint and SCLKC Marine Park during construction phase	I
			Other mitigation measures ▪ The ET will audit various parameters including actual daily numbers of HSFs, compliance with the 15-knot speed limit in the speed control zone and diversion compliance for SkyPier HSFs operating to / from Zhuhai and Macau; and ▪ The effectiveness of the CWD mitigation measures after implementation of initial six month SkyPier HSF diversion and speed restriction will be reviewed.	Area between the footprint and SCLKC Marine Park during construction phase	I
13.11.5.14 to 13.11.5.18	10.3.1	2.31	**Dolphin Exclusion Zone** ▪ Establishment of a 24 hr Dolphin Exclusion Zone (DEZ) with a 250 m radius around the land formation works areas;	Marine waters around land formation works area during construction phase	I
			▪ A DEZ would also be implemented during ground improvement works (e.g. DCM), water jetting works for submarine cables diversion, open trench dredging at the field joint locations and seawall construction; and		I
			▪ A DEZ would also be implemented during bored piling work but as a precautionary measure only.		N/A
13.11.5.19	10.4	2.31	**Acoustic Decoupling of Construction Equipment** ▪ Air compressors and other noisy equipment that must be mounted on steel barges should be acoustically-decoupled to the greatest extent feasible, for instance by using rubber or air-filled tyres; and ▪ Specific acoustic decoupling measures shall be specified during the detailed design of the project for use during the land formation works.	Around coastal works area during construction phase	I
13.11.5.20	10.6.1	2.29	**Spill Response Plan**	Construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
			▪ An oil and hazardous chemical spill response plan is proposed to be established during the construction phase as a precautionary measure so that appropriate actions to prevent or reduce risks to CWDs can be undertaken in the event of an accidental spillage.		
13.11.5.21 to 13.11.5.23	10.6.1	-	**Construction Vessel Speed Limits and Skipper Training** ▪ A speed limit of 10 knots should be strictly observed for construction vessels at areas with the highest CWD densities; and ▪ Vessels traversing through the work areas should be required to use predefined and regular routes (which would presumably become known to resident dolphins) to reduce disturbance to cetaceans due to vessel movements. Specific marine routes shall be specified by the Contractor prior to construction commencing.	All areas north and west of Lantau Island during construction phase	I
			Fisheries Impact – Construction Phase		
14.9.1.2 to 14.9.1.5	-		**Minimisation of Land Formation Area** ▪ Minimise the overall size of the land formation needed for the additional facilities to minimise the overall loss of habitat for fisheries resources.	Land formation footprint / during detailed design phase to completion of construction	I
14.9.1.6	-	-	**Use of Construction Methods with Minimal Risk/Disturbance** ▪ Use of non-dredge method for the main land formation and ancillary works including the diversion of the aviation fuel pipeline to the AFRF;	During construction phase at marine works area	I
			▪ Use of Deep Cement Mixing (DCM) method instead of conventional seabed dredging for the land formation works to reduce the risk of negative impacts through the elevation of suspended solids and contaminants on fisheries and the marine environment;		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		N/A
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		I
14.9.1.11	-		**Strict Enforcement of No-Dumping Policy** ▪ A policy prohibiting dumping of wastes, chemicals, oil, trash, plastic, or any other substance that would potentially be harmful to dolphins and/or their habitat in the work area; ▪ Mandatory educational programme of the no-dumpling policy be made available to all construction site personnel for all project-related works; ▪ Fines for infractions should be implemented; and ▪ Unscheduled, on-site audits shall be implemented.	All works area during the construction phase	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
14.9.1.12	-		**Good Construction Site Practices** ▪ Regular inspection of the integrity and effectiveness of all silt curtains and monitoring of effluents to ensure that any discharge meets effluent discharge guidelines; ▪ Keep the number of working or stationary vessels present on-site to the minimum anytime; and ▪ Unscheduled, on-site audits for all good site practice restrictions should be conducted, and fines or penalties sufficient to be an effective deterrent need to be levied against violators.	All works area during the construction phase	I
14.9.1.13 to 14.9.1.18	-		**Mitigation for Indirect Disturbance due to Deterioration of Water Quality** ▪ Water quality mitigation measures during construction phases include consideration of alternative construction methods, deployment of silt curtain and good site practices;	All works area during the construction phase	I
			▪ Alternative construction methods including use of non-dredge methods for ground improvement (e.g. Deep Cement Mixing (DCM), prefabricated vertical drains (PVD), sand compaction piles, steel cells, stone columns and vertical sand drains);		I
			▪ Use of bored piling in short duration to form the new approach lights and marker beacons for the new runway; and		N/A
			▪ Use of horizontal directional drilling (HDD) method and water jetting methods for placement of undersea cables and pipelines to minimise the disturbance to fisheries resources.		I
			Landscape and Visual Impact – Construction Phase		
Table 15.6	12.3	-	**CM1 -** The construction area and contractor's temporary works areas should be minimised to avoid impacts on adjacent landscape.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM2 -** Reduction of construction period to practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM3 -** Phasing of the construction stage to reduce visual impacts during the construction phase.	All works areas for duration of works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM4 -** Construction traffic (land and sea) including construction plants, construction vessels and barges should be kept to a practical minimum.	All works areas for duration of works; Upon handover and completion of works.	I

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
Table 15.6	12.3	-	**CM5 -** Erection of decorative mesh screens or construction hoardings around works areas in visually unobtrusive colours.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM6 -** Avoidance of excessive height and bulk of site buildings and structures.	New passenger concourse, terminal 2 expansion and other proposed airport related buildings and structures under the project; Upon handover and completion of works.	N/A
Table 15.6	12.3	-	**CM7** - Control of night-time lighting by hooding all lights and through minimisation of night working periods.	All works areas for duration of works; Upon handover and completion of works. – may be disassembled in phases	I
Table 15.6	12.3	-	**CM8 -** All existing trees shall be carefully protected during construction. Detailed Tree Protection Specification shall be provided in the Contract Specification. Under this specification, the Contractor shall be required to submit, for approval, a detailed working method statement for the protection of trees prior to undertaking any works adjacent to all retained trees, including trees in contractor's works areas.	All existing trees to be retained; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM9 -** Trees unavoidably affected by the works shall be transplanted where practical. A detailed Tree Transplanting Specification shall be provided in the Contract Specification, if applicable. Sufficient time for necessary tree root and crown preparation periods shall be allowed in the project programme.	All existing trees to be affected by the works; Upon handover and completion of works.	I
Table 15.6	12.3	-	**CM10 -** Land formation works shall be followed with advanced hydroseeding around taxiways and runways as soon as practical.	All affected existing grass areas around runways and verges/Duration of works;	N/A

EIA Ref.	EM&A Ref.	EP Condition	Environmental Protection Measures	Location / Duration of measures Timing of completion of measures	Mitigation Measures Implemented?^
				Upon handover and completion of works.	
			Cultural Heritage Impact – Construction Phase		
			Not applicable.		
			Health Impact – Aircraft Emissions		
			Not applicable.		
			Health Impact – Aircraft Noise		
			Not applicable.		

Notes:

I= implemented where applicable;

N/A= not applicable to the construction works implemented during the reporting month.

^ Checked by ET through site inspection and record provided by the Contractor.

Appendix C. Monitoring Schedule

Monitoring Schedule of This Reporting Period

Jun-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	**2** Site Inspection WQ General & Regular DCM mid-ebb: 10:25 mid-flood: 16:25	**3**	**4** Site Inspection CWD Survey (Land-based) WQ General & Regular DCM mid-ebb: 11:52 mid-flood: 18:38	**5** Site Inspection	**6** AR1A, AR2 WQ General & Regular DCM mid-ebb: 13:21 mid-flood: 20:31
7	**8** Site Inspection	**9** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 15:33 mid-flood: 08:23	**10** Site Inspection CWD Survey (Land-based)	**11** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 17:02 mid-flood: 09:49	**12** Site Inspection AR1A, AR2 NM1A, NM5	**13** WQ General & Regular DCM mid-ebb: 07:32 mid-flood: 12:05
14	**15** Site Inspection	**16** Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 10:23 mid-flood: 16:11	**17** CWD Survey (Vessel)	**18** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 11:30 mid-flood: 17:59	**19** Site Inspection	**20** WQ General & Regular DCM mid-ebb: 12:35 mid-flood: 19:32
21	**22** Site Inspection CWD Survey (Vessel)	**23** Site Inspection CWD Survey (Vessel) NM4, NM6 WQ General & Regular DCM mid-ebb: 14:29 mid-flood: 07:18	**24** Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM5	**25** WQ General & Regular DCM mid-ebb: 15:56 mid-flood: 08:45	**26** Site Inspection	**27** WQ General & Regular DCM mid-ebb: 17:35 mid-flood: 10:35
28	**29** Site Inspection	**30** Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 09:00 mid-flood: 15:05				

Notes:

CWD - Chinese White Dolphin

Air quality and Noise Monitoring Station

WQ - Water Quality
DCM - Deep Cement Mixing

NM1A/AR1A - Man Tung Road Park
NM4 - Ching Chung Hau Po Woon Primary School
NM5/AR2 - Village House, Tin Sum
NM6 - House No. 1, Sha Lo Wan

Tentative Monitoring Schedule of Next Reporting Period

Jul-20

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2 Site Inspection WQ General & Regular DCM mid-ebb: 10:50 mid-flood: 17:47	3 Site Inspection	4 WQ General & Regular DCM mid-ebb: 12:23 mid-flood: 19:41
5	6 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6	7 Site Inspection CWD Survey (Vessel, Land-based) WQ General & Regular DCM mid-ebb: 14:33 mid-flood: 07:27	8 Site Inspection CWD Survey (Vessel)	9 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 15:52 mid-flood: 08:51	10 Site Inspection	11 AR1A, AR2 WQ General & Regular DCM mid-ebb: 17:06 mid-flood: 10:24
12	13 Site Inspection CWD Survey (Vessel) NM4, NM6	14 Site Inspection WQ General & Regular DCM mid-ebb: 08:36 mid-flood: 14:02	15 Site Inspection CWD Survey (Land-based)	16 Site Inspection WQ General & Regular DCM mid-ebb: 10:15 mid-flood: 16:55	17 Site Inspection AR1A, AR2 NM1A, NM5	18 WQ General & Regular DCM mid-ebb: 11:33 mid-flood: 18:40
19	20 Site Inspection CWD Survey (Vessel)	21 Site Inspection CWD Survey (Vessel) WQ General & Regular DCM mid-ebb: 13:35 mid-flood: 06:25	22 Site Inspection	23 Site Inspection CWD Survey (Vessel) AR1A, AR2 NM1A, NM4, NM5, NM6 WQ General & Regular DCM mid-ebb: 14:59 mid-flood: 07:59	24 Site Inspection	25 WQ General & Regular DCM mid-ebb: 16:27 mid-flood: 09:39
26	27 Site Inspection	28 Site Inspection WQ General & Regular DCM mid-ebb: 07:18 mid-flood: 13:31	29 Site Inspection AR1A, AR2 NM1A, NM4, NM5, NM6	30 Site Inspection WQ General & Regular DCM mid-ebb: 09:37 mid-flood: 16:54	31 Site Inspection	
		Notes: CWD - Chinese White Dolphin Air quality and Noise Monitoring Station WQ - Water Quality DCM - Deep Cement Mixing NM1A/AR1A - Man Tung Road Park NM4 - Ching Chung Hau Po Woon Primary School NM5/AR2 - Village House, Tin Sum NM6 - House No. 1, Sha Lo Wan				

Appendix D. Monitoring Results

Air Quality Monitoring Results

1-hour TSP Results

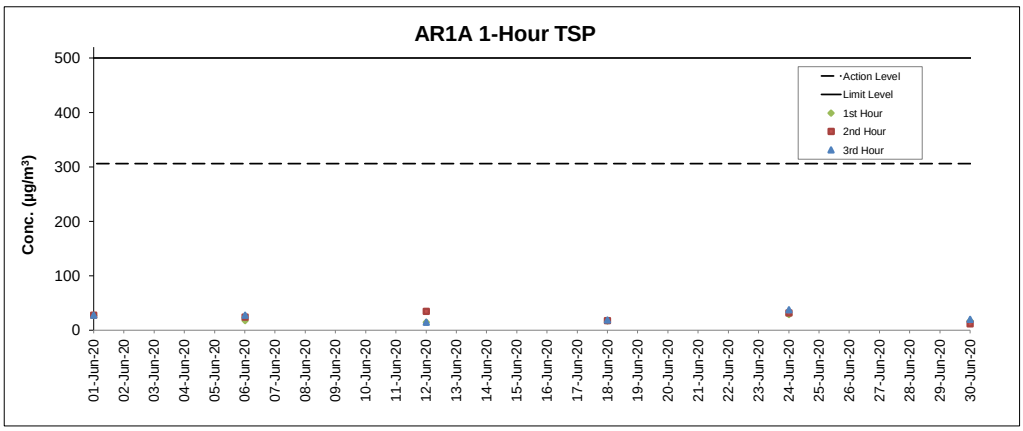
Station: AR1A- Man Tung Road Park

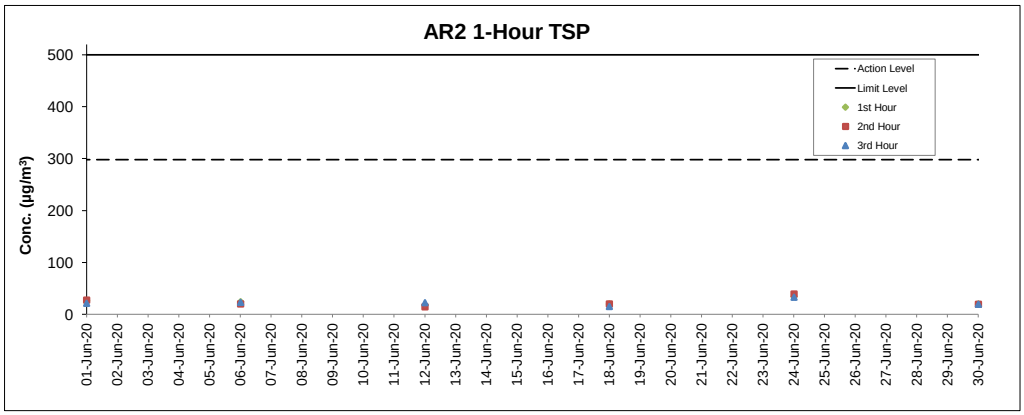
Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
01-Jun-20	13:41	Cloudy	6.1	210	27	306	500
01-Jun-20	14:41	Cloudy	6.7	206	28	306	500
01-Jun-20	15:41	Cloudy	5.0	206	28	306	500
06-Jun-20	13:37	Cloudy	5.3	146	18	306	500
06-Jun-20	14:37	Cloudy	7.2	139	24	306	500
06-Jun-20	15:37	Cloudy	3.3	114	28	306	500
12-Jun-20	13:20	Cloudy	4.2	246	15	306	500
12-Jun-20	14:20	Cloudy	5.8	260	35	306	500
12-Jun-20	15:20	Cloudy	3.3	71	15	306	500
18-Jun-20	13:20	Sunny	6.7	193	17	306	500
18-Jun-20	14:20	Sunny	5.6	217	18	306	500
18-Jun-20	15:20	Sunny	6.7	197	19	306	500
24-Jun-20	13:11	Cloudy	6.7	225	29	306	500
24-Jun-20	14:11	Cloudy	6.1	221	32	306	500
24-Jun-20	15:11	Cloudy	6.9	223	38	306	500
30-Jun-20	13:41	Sunny	6.4	240	17	306	500
30-Jun-20	14:41	Sunny	6.7	243	12	306	500
30-Jun-20	15:41	Sunny	4.2	164	20	306	500

1-hour TSP Results

Station: AR2- Village House, Tin Sum

Date	Time	Weather	Wind Speed (m/s)	Wind Direction (deg)	1-hr TSP (μg/m^3)	Action Level (μg/m^3)	Limit Level (μg/m^3)
01-Jun-20	9:47	Sunny	5.3	201	26	298	500
01-Jun-20	10:47	Sunny	6.1	215	27	298	500
01-Jun-20	11:47	Sunny	6.1	195	21	298	500
06-Jun-20	9:26	Cloudy	6.4	118	24	298	500
06-Jun-20	10:26	Cloudy	5.0	128	20	298	500
06-Jun-20	11:26	Cloudy	3.9	100	23	298	500
12-Jun-20	9:27	Cloudy	2.5	Variable	17	298	500
12-Jun-20	10:27	Cloudy	2.2	325	14	298	500
12-Jun-20	11:27	Cloudy	2.2	315	22	298	500
18-Jun-20	9:39	Sunny	6.1	230	20	298	500
18-Jun-20	10:39	Sunny	7.5	230	20	298	500
18-Jun-20	11:39	Sunny	6.9	238	15	298	500
24-Jun-20	9:24	Cloudy	6.9	228	34	298	500
24-Jun-20	10:24	Cloudy	6.9	227	39	298	500
24-Jun-20	11:24	Cloudy	6.4	233	33	298	500
30-Jun-20	9:36	Cloudy	2.2	337	20	298	500
30-Jun-20	10:36	Cloudy	2.2	313	19	298	500
30-Jun-20	11:36	Cloudy	5.3	248	19	298	500





Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Noise Monitoring Results

Noise Measurement Results

Station: NM1A- Man Tung Road Park

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
01-Jun-20	Cloudy	14:43	69.1	52.2	70
01-Jun-20	Cloudy	14:48	67.7	52.4	
01-Jun-20	Cloudy	14:53	72.5	53.9	
01-Jun-20	Cloudy	14:58	69.3	53.3	
01-Jun-20	Cloudy	15:03	70.4	53.3	
01-Jun-20	Cloudy	15:08	68.5	52.2	
12-Jun-20	Cloudy	13:10	72.5	62.3	73
12-Jun-20	Cloudy	13:15	73.8	60.1	
12-Jun-20	Cloudy	13:20	74.2	63.1	
12-Jun-20	Cloudy	13:25	70.5	59.1	
12-Jun-20	Cloudy	13:30	73.5	60.0	
12-Jun-20	Cloudy	13:35	72.8	58.2	
18-Jun-20	Sunny	14:17	67.4	54.3	67
18-Jun-20	Sunny	14:22	69.2	56.1	
18-Jun-20	Sunny	14:27	66.1	50.4	
18-Jun-20	Sunny	14:32	66.1	51.7	
18-Jun-20	Sunny	14:37	67.6	52.1	
18-Jun-20	Sunny	14:42	67.6	50.9	
24-Jun-20	Cloudy	13:41	70.5	52.5	67
24-Jun-20	Cloudy	13:46	69.4	53.0	
24-Jun-20	Cloudy	13:51	68.5	52.5	
24-Jun-20	Cloudy	13:56	69.0	52.0	
24-Jun-20	Cloudy	14:01	68.7	53.5	
24-Jun-20	Cloudy	14:06	68.4	54.2	
30-Jun-20	Sunny	14:50	73.3	50.5	71
30-Jun-20	Sunny	14:55	71.3	49.3	
30-Jun-20	Sunny	15:00	70.6	52.0	
30-Jun-20	Sunny	15:05	72.2	52.7	
30-Jun-20	Sunny	15:10	70.7	50.0	
30-Jun-20	Sunny	15:15	71.6	52.6	

Remarks:

+3dB (A) correction was applied to free-field measurement.

Noise Measurement Results

Station: NM4- Ching Chung Hau Po Woon Primary School

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
01-Jun-20	Sunny	13:51	58.8	54.5	60
01-Jun-20	Sunny	13:56	58.4	54.5	
01-Jun-20	Sunny	14:01	60.6	54.4	
01-Jun-20	Sunny	14:06	59.4	54.6	
01-Jun-20	Sunny	14:11	60.5	54.8	
01-Jun-20	Sunny	14:16	59.9	55.5	
11-Jun-20	Cloudy	13:00	63.4	58.8	64
11-Jun-20	Cloudy	13:05	62.9	58.7	
11-Jun-20	Cloudy	13:10	61.0	58.0	
11-Jun-20	Cloudy	13:15	62.7	57.9	
11-Jun-20	Cloudy	13:20	61.3	57.6	
11-Jun-20	Cloudy	13:25	62.7	58.2	
18-Jun-20	Sunny	13:19	62.8	57.2	62
18-Jun-20	Sunny	13:24	60.7	57.7	
18-Jun-20	Sunny	13:29	60.4	58.0	
18-Jun-20	Sunny	13:34	60.9	57.3	
18-Jun-20	Sunny	13:39	61.5	57.3	
18-Jun-20	Sunny	13:44	60.5	56.4	
23-Jun-20	Cloudy	11:03	59.4	56.5	61
23-Jun-20	Cloudy	11:08	60.2	56.2	
23-Jun-20	Cloudy	11:13	59.7	56.0	
23-Jun-20	Cloudy	11:18	61.0	55.6	
23-Jun-20	Cloudy	11:23	59.6	55.6	
23-Jun-20	Cloudy	11:28	59.2	55.6	
30-Jun-20	Cloudy	13:44	60.6	57.2	62
30-Jun-20	Cloudy	13:49	61.9	57.3	
30-Jun-20	Cloudy	13:54	60.6	57.2	
30-Jun-20	Cloudy	13:59	60.9	57.3	
30-Jun-20	Cloudy	14:04	62.3	57.5	
30-Jun-20	Cloudy	14:09	60.6	57.1	

Remarks:

+3dB (A) correction was applied to free-field measurement.

Noise Measurement Results

Station: NM5- Village House, Tin Sum

Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
01-Jun-20	Sunny	9:48	67.6	43.9	64
01-Jun-20	Sunny	9:53	52.1	43.1	
01-Jun-20	Sunny	9:58	62.4	44.0	
01-Jun-20	Sunny	10:03	55.0	43.6	
01-Jun-20	Sunny	10:08	56.0	42.1	
01-Jun-20	Sunny	10:13	56.2	42.8	
12-Jun-20	Cloudy	10:49	57.2	47.8	58
12-Jun-20	Cloudy	10:54	55.2	48.6	
12-Jun-20	Cloudy	10:59	50.1	47.1	
12-Jun-20	Cloudy	11:04	55.2	47.2	
12-Jun-20	Cloudy	11:09	60.3	48.7	
12-Jun-20	Cloudy	11:14	57.8	47.1	
18-Jun-20	Sunny	10:03	51.9	43.2	58
18-Jun-20	Sunny	10:08	53.8	43.0	
18-Jun-20	Sunny	10:13	60.3	45.1	
18-Jun-20	Sunny	10:18	52.5	43.7	
18-Jun-20	Sunny	10:23	61.7	46.2	
18-Jun-20	Sunny	10:28	54.1	49.2	
24-Jun-20	Cloudy	10:31	54.5	44.6	55
24-Jun-20	Cloudy	10:36	51.8	44.8	
24-Jun-20	Cloudy	10:41	53.9	44.0	
24-Jun-20	Cloudy	10:46	54.5	43.0	
24-Jun-20	Cloudy	10:51	52.4	43.8	
24-Jun-20	Cloudy	10:56	47.4	44.2	
30-Jun-20	Cloudy	9:58	51.2	46.8	57
30-Jun-20	Cloudy	10:03	56.7	46.2	
30-Jun-20	Cloudy	10:08	59.8	46.7	
30-Jun-20	Cloudy	10:13	52.6	47.8	
30-Jun-20	Cloudy	10:18	61.5	45.6	
30-Jun-20	Cloudy	10:23	60.5	43.2	

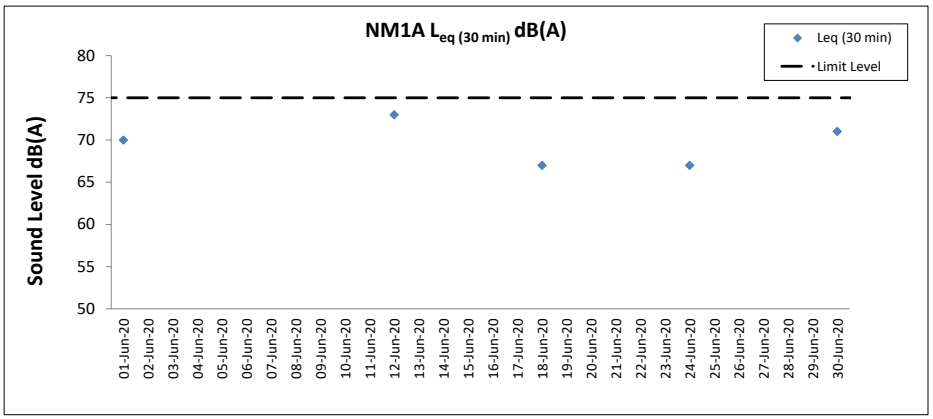
Remarks:
+3dB (A) correction was applied to free-field measurement.

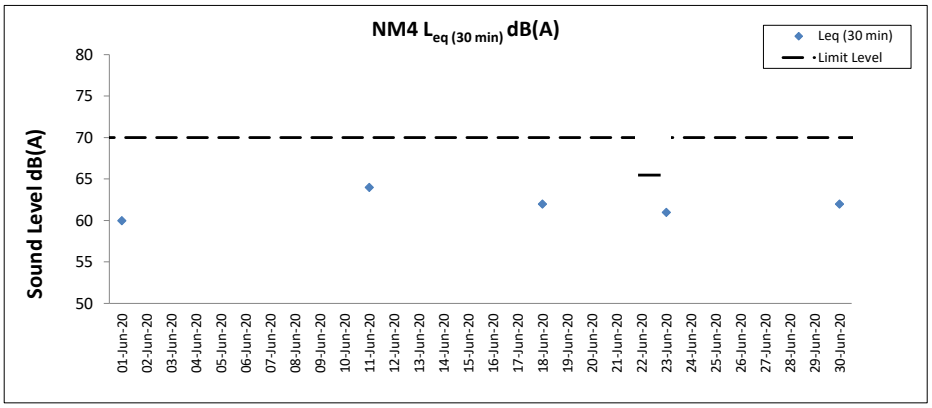
Noise Measurement Results

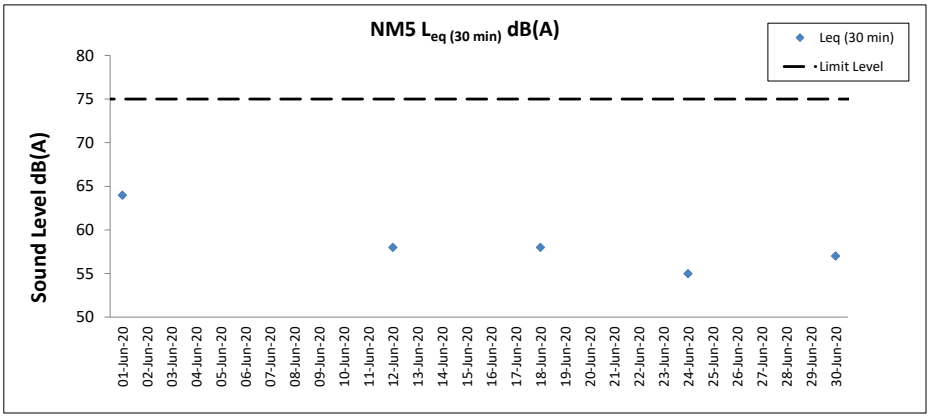
Station: NM6- House No.1 Sha Lo Wan

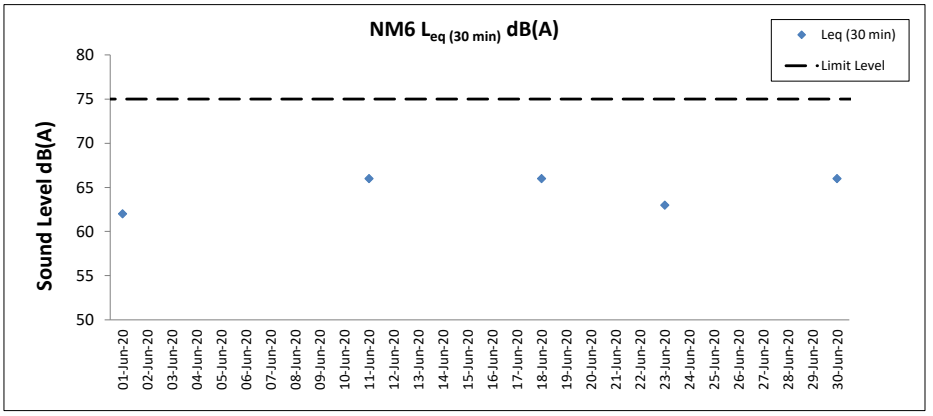
Date	Weather	Time	Measured L_{10} dB(A)	Measured L_{90} dB(A)	$L_{eq(30mins)}$ dB(A)
01-Jun-20	Sunny	15:39	71.4	51.1	62
01-Jun-20	Sunny	15:44	69.5	50.3	
01-Jun-20	Sunny	15:49	71.7	53.2	
01-Jun-20	Sunny	15:54	63.5	51.1	
01-Jun-20	Sunny	15:59	60.4	50.1	
01-Jun-20	Sunny	16:04	63.4	53.8	
11-Jun-20	Cloudy	15:47	62.8	47.3	66
11-Jun-20	Cloudy	15:52	66.6	49.7	
11-Jun-20	Cloudy	15:57	67.1	53.4	
11-Jun-20	Cloudy	16:02	63.9	53.3	
11-Jun-20	Cloudy	16:07	64.4	54.3	
11-Jun-20	Cloudy	16:12	65.2	54.6	
18-Jun-20	Sunny	15:46	65.8	63.3	66
18-Jun-20	Sunny	15:51	66.4	62.5	
18-Jun-20	Sunny	15:56	73.0	64.1	
18-Jun-20	Sunny	16:01	68.9	63.8	
18-Jun-20	Sunny	16:06	67.9	61.5	
18-Jun-20	Sunny	16:11	71.9	62.3	
23-Jun-20	Cloudy	9:42	54.9	49.9	63
23-Jun-20	Cloudy	9:47	61.7	50.0	
23-Jun-20	Cloudy	9:52	57.1	51.3	
23-Jun-20	Cloudy	9:57	60.5	51.1	
23-Jun-20	Cloudy	10:02	59.3	51.2	
23-Jun-20	Cloudy	10:07	56.0	50.7	
30-Jun-20	Cloudy	15:49	69.6	50.2	66
30-Jun-20	Cloudy	15:54	73.2	64.1	
30-Jun-20	Cloudy	15:59	67.9	61.5	
30-Jun-20	Cloudy	16:04	65.9	63.3	
30-Jun-20	Cloudy	16:09	64.3	54.1	
30-Jun-20	Cloudy	16:14	67.7	61.4	

Remarks:
+3dB (A) correction was applied to free-field measurement.









Notes

1. Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
2. Weather conditions during monitoring are presented in the data tables above.
3. QA/QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Water Quality Monitoring Results

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 02 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	10:07	8.8	Surface	1.0	0.5	238	28.3	28.3	7.9	7.9	17.0	17.0	90.7	90.6	6.4	5.9	4.0	5.5	4	4	85	87	815607	804233	<0.2	<0.2	1.7	1.7
						1.0	0.5	242	28.3		7.9		17.0		90.4		6.4		4.0		4		84				<0.2		1.7	
					Middle	4.4	0.4	224	26.7	26.7	7.9	7.9	25.3	25.3	77.2	77.2	5.4		4.9		4		87				<0.2		1.7	
						4.4	0.4	239	26.6		7.9		25.3		77.1		5.4		4.9		4		88				<0.2		1.7	
					Bottom	7.8	0.4	230	26.2	26.2	7.9	7.9	29.5	29.5	72.9	73.0	5.0	5.0	7.6		4		89				<0.2		1.7	
						7.8	0.5	240	26.2		7.9		29.5		73.1		5.0		7.7		5		91				<0.2		1.7	
C2	Cloudy	Moderate	11:26	11.8	Surface	1.0	1.0	155	28.2	28.2	7.9	7.9	15.7	15.7	85.2	85.0	6.1	5.6	7.2	7.8	5	6	87	91	825681	806959	<0.2	<0.2	1.6	1.6
						1.0	1.0	163	28.1		7.9		15.7		84.8		6.1		7.4		5		87				<0.2		1.6	
					Middle	5.9	0.8	158	27.6	27.6	7.9	7.9	21.2	21.2	70.8	70.8	5.0		7.9		6		91				<0.2		1.6	
						5.9	0.8	169	27.5		7.9		21.2		70.8		5.0		7.8		6		91				<0.2		1.6	
					Bottom	10.8	0.4	152	26.9	26.9	7.9	7.9	25.1	25.1	67.2	67.4	4.7	4.7	8.3		6		95				<0.2		1.5	
						10.8	0.5	162	26.9		7.9		25.1		67.6		4.7		8.4		6		95				<0.2		1.5	
C3	Rainy	Moderate	09:21	12.0	Surface	1.0	0.4	75	27.5	27.5	8.0	8.0	22.4	22.5	78.0	78.0	5.4	5.3	3.6	5.0	4	4	87	91	822099	817796	<0.2	<0.2	1.6	1.6
						1.0	0.4	75	27.5		8.0		22.5		78.0		5.4		3.6		4		87				<0.2		1.6	
					Middle	6.0	0.3	103	27.0	27.0	8.0	8.0	24.9	24.9	74.8	74.8	5.2		3.2		4		91				<0.2		1.5	
						6.0	0.3	107	26.9		8.0		24.9		74.8		5.2		3.4		4		90				<0.2		1.6	
					Bottom	11.0	0.1	357	26.4	26.4	8.0	8.0	28.3	28.3	69.0	69.2	4.7	4.8	8.4		4		95				<0.2		1.5	
						11.0	0.1	328	26.4		8.0		28.3		69.3		4.8		7.8		4		94				<0.2		1.5	
IM1	Cloudy	Moderate	10:28	5.2	Surface	1.0	0.1	207	27.5	27.5	7.9	7.9	21.4	21.4	80.2	80.3	5.6	5.7	8.3	8.6	5	6	87	88	817953	807141	<0.2	<0.2	1.2	1.2
						1.0	0.1	227	27.4		7.9		21.3		80.4		5.7		9.2		5		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.0	71	26.7	26.8	7.9	7.9	26.7	26.7	77.6	77.8	5.4	5.4	8.8		6		90				<0.2		1.3	
						4.2	0.0	72	26.8		7.9		26.7		78.0		5.4		8.0		6		90				<0.2		1.2	
IM2	Cloudy	Moderate	10:35	7.0	Surface	1.0	0.2	178	28.0	28.1	7.9	7.9	19.3	19.2	81.1	80.5	5.7	5.3	7.6	8.7	4	4	85	87	818180	806177	<0.2	<0.2	1.3	1.4
						1.0	0.2	184	28.1		7.9		19.1		79.9		5.6		8.5		4		86				<0.2		1.4	
					Middle	3.5	0.3	153	26.6	26.6	7.9	7.9	26.8	26.7	70.2	70.3	4.9		10.6		4		87				<0.2		1.3	
						3.5	0.3	161	26.6		7.9		26.7		70.3		4.9		10.8		4		88				<0.2		1.4	
					Bottom	6.0	0.1	85	26.4	26.4	7.9	7.9	28.4	28.4	71.3	71.6	4.9	4.9	7.1		4		89				<0.2		1.4	
						6.0	0.1	85	26.4		7.9		28.4		71.8		4.9		7.8		4		89				<0.2		1.3	
IM3	Cloudy	Moderate	10:42	7.2	Surface	1.0	0.1	204	28.4	28.4	7.9	7.9	16.9	16.8	91.1	91.0	6.5	5.6	4.2	8.4	4	4	86	88	818786	805608	<0.2	<0.2	1.2	1.3
						1.0	0.1	208	28.4		7.9		16.8		90.9		6.4		4.2		4		86				<0.2		1.3	
					Middle	3.6	0.3	175	26.6	26.6	7.8	7.8	25.8	25.8	67.7	67.7	4.7		7.8		4		87				<0.2		1.3	
						3.6	0.3	184	26.6		7.8		25.7		67.6		4.7		7.2		4		88				<0.2		1.3	
					Bottom	6.2	0.1	121	26.4	26.4	7.8	7.8	27.8	27.8	67.7	67.8	4.7	4.7	12.5		4		89				<0.2		1.3	
						6.2	0.1	123	26.4		7.8		27.8		67.8		4.7		14.3		4		90				<0.2		1.3	
IM4	Cloudy	Moderate	10:51	7.9	Surface	1.0	0.8	209	28.1	28.1	7.8	7.8	18.3	18.3	80.2	80.1	5.7	5.6	7.1	10.2	8	7	85	88	819725	804614	<0.2	<0.2	1.4	1.4
						1.0	0.8	224	28.1		7.8		18.3		79.9		5.7		7.5		8		86				<0.2		1.3	
					Middle	4.0	0.8	198	27.5	27.5	7.8	7.8	20.0	20.0	76.7	76.6	5.4		9.9		7		88				<0.2		1.4	
						4.0	0.8	198	27.4		7.8		19.9		76.5		5.4		9.6		7		86				<0.2		1.3	
					Bottom	6.9	0.7	193	27.2	27.2	7.8	7.8	24.2	24.2	74.3	74.4	5.2	5.2	13.9		7		90				<0.2		1.4	
						6.9	0.7	194	27.2		7.8		24.2		74.5		5.2		13.3		6		90				<0.2		1.3	
IM5	Cloudy	Moderate	11:02	7.2	Surface	1.0	0.7	219	28.1	28.1	7.8	7.8	18.3	18.3	83.1	83.0	5.9	5.8	6.2	9.1	8	7	86	88	820747	804859	<0.2	<0.2	1.5	1.4
						1.0	0.7	234	28.1		7.8		18.4		82.9		5.9		6.3		8		86				<0.2		1.5	
					Middle	3.6	0.7	209	28.0	28.0	7.8	7.8	18.6	18.6	80.2	80.0	5.7		6.4		6		87				<0.2		1.4	
						3.6	0.7	225	27.9		7.8		18.6		79.8		5.6		6.4		6		88				<0.2		1.4	
					Bottom	6.2	0.5	199	27.6	27.7	7.8	7.8	20.8	20.8	79.5	79.7	5.6	5.6	14.6		6		89				<0.2		1.4	
						6.2	0.6	210	27.7		7.8		20.8		79.9		5.6		14.4		6		90				<0.2		1.4	
IM6	Cloudy	Moderate	11:11	7.2	Surface	1.0	0.5	271	28.1	28.1	7.8	7.8	18.0	18.0	79.6	79.1	5.6	5.5	6.5	11.4	5	6	85	88	821066	805806	<0.2	<0.2	1.3	1.4
						1.0	0.6	297	28.0		7.8		18.0		78.6		5.6		6.7		5		86				<0.2		1.4	
					Middle	3.6	0.5	255	27.9	27.9	7.8	7.8	19.4	19.4	76.7	76.7	5.4		11.4		6		88				<0.2		1.4	
						3.6	0.6	263	27.9		7.8		19.4		76.6		5.4		11.9		6		88				<0.2		1.3	
					Bottom	6.2	0.4	257	27.8	27.8	7.8	7.8	19.9	19.9	75.7	75.8	5.3	5.3	15.8		6		90				<0.2		1.3	
						6.2	0.4	266	27.8		7.8		19.9		75.8		5.3		15.8		6		90				<0.2		1.4	
IM7	Cloudy	Moderate	11:19	8.2	Surface	1.0	0.4	255	28.1	28.1	7.8	7.8	18.5	18.5	78.0	77.9	5.5	5.5	6.4	9.2	5	6	86	88	821339	806811	<0.2	<0.2	1.6	1.6
						1.0	0.4	265	28.0		7.8		18.6		77.8		5.5		6.6		6		86				<0.2		1.5	
					Middle	4.1	0.4	235	28.0	28.0	7.8	7.8	18.8	18.8	77.0	76.9	5.4		7.4		6		87				<0.2		1.6	
						4.1	0.4	240	28.0		7.8		18.8		76.7		5.4		7.6		7		88				<0.2		1.6	
					Bottom	7.2	0.3	227	27.7	27.7	7.7	7.7	20.7	20.7	74.4	74.5	5.2	5.2	13.5		6		89				<0.2		1.5	
						7.2	0.3	245	27.7		7.7		20.7		74.6		5.2		13.5		7		90				<0.2		1.6	
IM8	Cloudy	Moderate	10:59	7.8	Surface	1.0	0.1	174	28.1	28.1	8.0	8.0	18.0	18.0	80.6	80.6	5.7	5.7	6.7	7.3	7	6	88	91	821834	808145	<0.2	<0.2	1.4	1.3
						1.0	0.1	184	28.1		8.0		18.0		80.5		5.7		6.8		7		87				<0.2		1.3	
					Middle	3.9	0.1	191	28.1	28.1	8.0	8.0	18.0	18.0	80.4	80.4	5.7		6.9		7		91				<0.2		1.2	
						3.9	0.1	203	28.1		8.0		18.0		80.3		5.7		7.1		6		92				<0.2		1.4	
					Bottom	6.8	0.2	176	27.8	27.9	7.9	7.9	20.1	20.1	77.5	77.6	5.4	5.5	8.1		5		95				<0.2		1.3	
						6.8	0.2	184	27.9		7.9		20.1		77.7		5.5		8.3		5		95				<0.2		1.2	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 02 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:53	7.2	Surface	1.0	0.3	116	28.1	28.1	8.0	8.0	17.7	17.7	80.9	80.8	5.7	5.7	7.1	7.7	7	6	87	91	822077	808821	<0.2	<0.2	1.3	1.4
						1.0	0.3	122	28.1		8.0		17.8		80.6		5.7		7.1		7		88							
					Middle	3.6	0.4	108	28.0	28.0	7.9	7.9	18.0	18.0	79.7	79.8	5.6		7.6		6		91				<0.2		1.4	
						3.6	0.4	116	28.0		7.9		18.0		79.8		5.7		7.4		6		91				<0.2		1.3	
					Bottom	6.2	0.3	111	27.8	27.8	7.9	7.9	19.6	19.6	77.6	77.8	5.5	5.5	8.6		4		95				<0.2		1.4	
						6.2	0.3	118	27.8		7.9		19.6		77.9		5.5		8.8		4		96				<0.2		1.3	
IM10	Cloudy	Moderate	10:44	6.8	Surface	1.0	0.8	108	28.1	28.1	8.0	8.0	16.7	16.7	84.3	84.3	6.0	5.8	7.9	9.6	4	4	87	91	822402	809783	<0.2	<0.2	1.3	1.3
						1.0	0.8	114	28.0		8.0		16.7		84.2		6.0		8.2		4		87				<0.2		1.3	
					Middle	3.4	0.7	106	27.9	27.9	7.9	7.9	18.9	19.0	78.7	78.7	5.6		9.9		4		91				<0.2		1.3	
						3.4	0.7	110	27.9		7.9		19.0		78.7		5.6		9.9		4		92				<0.2		1.2	
					Bottom	5.8	0.5	102	27.9	27.9	7.9	7.9	19.2	19.2	79.8	79.9	5.6	5.6	10.9		5		95				<0.2		1.4	
						5.8	0.5	103	27.9		7.9		19.2		80.0		5.6		11.0		5		95				<0.2		1.2	
IM11	Cloudy	Moderate	10:31	7.8	Surface	1.0	0.8	110	28.2	28.2	8.0	8.0	16.0	16.0	85.4	85.3	6.1	5.8	7.8	8.7	4	5	88	91	822072	811441	<0.2	<0.2	1.4	1.4
						1.0	0.9	112	28.1		8.0		16.0		85.1		6.1		7.9		4		87				<0.2		1.3	
					Middle	3.9	0.6	113	27.9	27.9	7.9	7.9	19.2	19.3	78.3	78.3	5.5		8.5		4		91				<0.2		1.3	
						3.9	0.6	123	27.9		7.9		19.3		78.3		5.5		8.9		4		91				<0.2		1.4	
					Bottom	6.8	0.5	113	27.8	27.8	7.9	7.9	19.8	19.8	78.5	78.6	5.5	5.5	9.6		6		95				<0.2		1.3	
						6.8	0.5	117	27.8		7.9		19.8		78.6		5.5		9.7		6		95				<0.2		1.4	
IM12	Cloudy	Moderate	10:22	9.6	Surface	1.0	0.6	119	28.4	28.4	8.0	8.0	15.6	15.7	85.9	85.9	6.1	5.8	6.1	8.0	4	5	87	91	821472	812027	<0.2	<0.2	1.4	1.4
						1.0	0.7	120	28.4		8.0		15.7		85.9		6.1		6.1		4		88				<0.2		1.3	
					Middle	4.8	0.5	114	27.9	27.9	7.9	7.9	19.1	19.1	76.7	76.7	5.4		8.2		5		90				<0.2		1.3	
						4.8	0.6	122	27.9		7.9		19.1		76.6		5.4		7.9		5		91				<0.2		1.5	
					Bottom	8.6	0.3	77	27.2	27.2	7.9	7.9	23.8	23.9	68.9	68.8	4.8	4.8	9.5		6		95				<0.2		1.4	
						8.6	0.3	77	27.2		7.9		23.9		68.6		4.8		10.0		6		95				<0.2		1.4	
SR1A	Rainy	Moderate	10:02	5.6	Surface	1.0	-	-	28.0	28.0	7.9	7.9	17.5	17.5	81.1	81.0	5.8	5.8	6.6	6.8	6	5	-	-	819975	812655	-	-	-	-
						1.0	-	-	27.9		7.9		17.5		80.9		5.8		6.7		6		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	27.7	27.7	7.9	7.9	20.7	20.8	75.3	75.2	5.3	5.3	6.9		3		-				-		-	
						4.6	-	-	27.7		7.9		20.8		75.1		5.3		6.9		3		-				-		-	
SR2	Rainy	Moderate	09:48	5.0	Surface	1.0	0.6	81	28.2	28.2	7.9	7.9	16.0	16.0	84.1	84.1	6.0	6.0	5.5	5.8	3	5	88	89	821450	814174	<0.2	<0.2	1.3	1.3
						1.0	0.6	82	28.1		7.9		16.0		84.0		6.0		5.6		3		87				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	70	27.9	27.9	7.9	7.9	19.3	19.3	78.5	78.6	5.5	5.5	6.0		6		90				<0.2		1.2	
						4.0	0.3	70	27.9		7.9		19.3		78.6		5.5		6.0		6		91				<0.2		1.2	
SR3	Cloudy	Moderate	11:05	8.8	Surface	1.0	0.2	208	28.2	28.2	7.9	7.9	17.0	17.0	84.1	84.1	6.0	5.8	6.0	6.9	7	7	-	-	822136	807575	-	-	-	-
						1.0	0.2	210	28.2		7.9		17.1		84.0		6.0		6.0		7		-				-		-	
					Middle	4.4	0.4	181	28.0	28.0	7.9	7.9	17.8	17.8	78.4	78.3	5.6		6.3		7		-				-		-	
						4.4	0.5	196	27.9		7.9		17.8		78.2		5.6		6.3		7		-				-		-	
					Bottom	7.8	0.3	182	27.7	27.7	7.9	7.9	20.4	20.4	75.1	75.3	5.3	5.3	8.2		6		-				-		-	
						7.8	0.3	185	27.7		7.9		20.4		75.5		5.3		8.5		6		-				-		-	
SR4A	Cloudy	Moderate	09:47	9.0	Surface	1.0	0.1	320	28.3	28.3	7.8	7.8	16.6	16.6	87.8	87.3	6.2	5.7	7.2	7.4	6	6	-	-	817212	807793	-	-	-	-
						1.0	0.1	350	28.2		7.8		16.6		86.8		6.2		8.2		6		-				-		-	
					Middle	4.5	0.3	59	27.0	27.0	7.8	7.8	25.3	25.4	73.2	73.2	5.1		6.1		6		-				-		-	
						4.5	0.3	61	27.0		7.8		25.4		73.1		5.1		6.4		6		-				-		-	
					Bottom	8.0	0.2	58	26.9	26.9	7.8	7.8	25.7	25.7	73.5	73.6	5.1	5.1	8.1		5		-				-		-	
						8.0	0.3	59	26.9		7.8		25.7		73.7		5.1		8.5		5		-				-		-	
SR5A	Cloudy	Moderate	09:29	4.5	Surface	1.0	0.3	116	28.3	28.3	7.8	7.8	16.9	16.9	87.9	88.0	6.2	6.2	6.9	7.3	5	5	-	-	816579	810683	-	-	-	-
						1.0	0.3	116	28.3		7.8		16.9		88.0		6.2		6.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	94	28.3	28.3	7.8	7.8	17.9	17.9	88.5	88.6	6.2	6.3	7.7		4		-				-		-	
						3.5	0.2	97	28.3		7.8		17.9		88.6		6.3		7.7		4		-				-		-	
SR6A	Cloudy	Moderate	08:54	4.2	Surface	1.0	0.1	18	28.2	28.2	7.7	7.7	19.0	19.0	82.0	81.8	5.8	5.8	4.3	5.1	4	4	-	-	817958	814721	-	-	-	-
						1.0	0.1	19	28.2		7.7		19.0		81.6		5.7		4.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	324	28.1	28.1	7.7	7.7	19.8	19.8	79.4	79.5	5.6	5.6	5.9		3		-				-		-	
						3.2	0.0	339	28.1		7.7		19.8		79.5		5.6		5.9		3		-				-		-	
SR7	Sunny	Moderate	08:42	18.5	Surface	1.0	0.4	63	27.0	27.0	8.0	8.0	24.4	24.4	75.3	75.2	5.2	5.0	3.3	3.7	4	4	-	-	823657	823749	-	-	-	-
						1.0	0.5	64	26.9		8.0		24.5		75.1		5.2		3.3		4		-				-		-	
					Middle	9.3	0.1	336	26.2	26.2	8.0	8.0	29.2	29.3	66.4	66.4	4.8		3.6		4		-				-		-	
						9.3	0.1	346	26.2		8.0		29.3		66.4		4.8		3.7		4		-				-		-	
					Bottom	17.5	0.2	3	26.0	26.0	8.0	8.0	29.9	29.9	66.9	67.0	4.6	4.6	4.3		4		-				-		-	
						17.5	0.2	3	26.0		8.0		29.9		67.0		4.6		4.2		4		-				-		-	
SR8	Cloudy	Calm	10:13	4.7	Surface	1.0	-	-	28.3	28.3	7.9	7.9	17.5	17.6	82.3	82.0	5.8	5.8	11.3	12.5	5	6	-	-	820369	811620	-	-	-	-
						1.0	-	-	28.3		7.9		17.6		81.7		5.8		11.1		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	28.1	28.1	7.9	7.9	18.5	18.5	79.4	79.5	5.6	5.6	13.6		6		-				-		-	
						3.7	-	-	28.1		7.9		18.5		79.5		5.6		13.8		6		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 02 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	15:52	8.7	Surface	1.0	0.4	43	28.3	28.3	7.8	7.8	16.6	16.5	88.8	88.9	6.3	6.2	5.3	8.1	4	4	86	88	815609	804224	<0.2	<0.2	1.0	1.1
						1.0	0.4	45	28.2		7.8		16.4		89.0		6.3		5.3		4		87				<0.2		1.0	
					Middle	4.4	0.4	50	27.8	27.8	7.8	7.8	18.8	18.8	85.1	85.0	6.0		7.4		4		88				<0.2		1.1	
						4.4	0.4	51	27.7		7.8		18.8		84.9		6.0		8.0		4		88				<0.2		1.2	
					Bottom	7.7	0.4	61	27.5	27.6	7.8	7.8	24.6	24.6	79.6	80.0	5.5	5.5	11.2		4		90				<0.2		1.0	
						7.7	0.4	63	27.6		7.8		24.6		80.3		5.5		11.3		4		91				<0.2		1.0	
C2	Cloudy	Moderate	14:41	10.8	Surface	1.0	0.6	187	28.0	28.0	7.9	7.9	12.9	12.9	80.3	80.0	5.9	5.3	6.9	7.4	5	5	84	89	825691	806959	<0.2	<0.2	1.2	1.4
						1.0	0.6	189	27.9		7.9		12.9		79.7		5.8		7.0		5		85				<0.2		1.1	
					Middle	5.4	0.2	232	27.2	27.2	7.9	7.9	21.5	21.4	66.5	66.4	4.7		7.0		5		89				<0.2		1.6	
						5.4	0.2	250	27.2		7.9		21.4		66.3		4.7		7.1		4		89				<0.2		1.5	
					Bottom	9.8	0.3	354	27.1	27.1	7.9	7.9	24.1	24.1	66.2	66.3	4.6	4.6	8.0		4		92				<0.2		1.6	
						9.8	0.3	326	27.1		7.9		24.1		66.3		4.6		8.3		4		93				<0.2		1.5	
C3	Rainy	Moderate	16:24	12.1	Surface	1.0	0.3	230	28.0	28.0	8.0	8.0	17.8	17.9	87.1	87.1	6.2	5.7	4.2	5.9	3	4	84	89	822093	817787	<0.2	<0.2	1.3	1.2
						1.0	0.3	238	27.9		8.0		17.9		87.0		6.2		4.2		3		85				<0.2		1.3	
					Middle	6.1	0.4	237	26.7	26.7	8.0	8.0	23.1	23.1	73.9	73.6	5.2		5.9		4		88				<0.2		1.1	
						6.1	0.4	249	26.6		8.0		23.2		73.3		5.2		6.1		4		89				<0.2		1.1	
					Bottom	11.1	0.4	276	26.4	26.4	7.9	7.9	28.7	28.7	69.8	70.0	4.8	4.8	7.3		4		93				<0.2		1.2	
						11.1	0.4	292	26.4		7.9		28.7		70.1		4.8		7.6		4		92				<0.2		1.1	
IM1	Rainy	Moderate	15:30	4.8	Surface	1.0	0.1	338	28.0	28.0	7.9	7.9	19.0	19.1	94.6	94.2	6.7	6.7	4.7	4.9	3	3	88	89	817971	807129	<0.2	<0.2	1.3	1.4
						1.0	0.1	348	27.9		7.9		19.1		93.8		6.6		4.8		3		86				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.0	320	27.8	27.8	7.9	7.9	22.1	22.0	83.5	83.8	5.8	5.8	5.1		3		89				<0.2		1.5	
						3.8	0.0	324	27.8		7.9		22.0		84.1		5.8		5.0		3		91				<0.2		1.4	
IM2	Rainy	Moderate	15:22	6.9	Surface	1.0	0.5	6	28.2	28.2	7.9	7.9	19.3	19.3	87.6	87.7	6.1	6.1	5.2	7.0	6	5	87	88	818186	806163	<0.2	<0.2	1.4	1.4
						1.0	0.6	6	28.2		7.9		19.3		87.7		6.2		5.2		6		85				<0.2		1.5	
					Middle	3.5	0.6	3	28.0	28.0	7.9	7.9	20.6	20.6	86.5	86.5	6.0		5.8		4		88				<0.2		1.4	
						3.5	0.6	3	28.0		7.9		20.6		86.4		6.0		5.8		5		88				<0.2		1.3	
					Bottom	5.9	0.1	354	26.8	26.8	7.8	7.8	26.5	26.5	70.7	70.8	4.9	4.9	9.9		5		90				<0.2		1.4	
						5.9	0.1	326	26.7		7.8		26.6		70.9		4.9		9.9		5		91				<0.2		1.3	
IM3	Cloudy	Moderate	15:15	7.0	Surface	1.0	0.6	329	28.0	27.9	7.9	7.9	18.8	18.8	90.3	90.1	6.4	5.7	5.3	11.6	5	5	85	88	818762	805575	<0.2	<0.2	1.5	1.5
						1.0	0.6	331	27.8		7.9		18.8		89.8		6.4		5.8		5		86				<0.2		1.5	
					Middle	3.5	0.6	332	26.9	26.9	7.8	7.8	25.6	25.6	71.1	70.9	4.9		10.9		5		87				<0.2		1.4	
						3.5	0.6	305	26.8		7.8		25.6		70.7		4.9		11.5		5		88				<0.2		1.5	
					Bottom	6.0	0.3	304	26.6	26.6	7.8	7.8	27.2	27.2	69.8	69.9	4.8	4.8	18.0		4		89				<0.2		1.6	
						6.0	0.3	305	26.6		7.8		27.2		70.0		4.8		18.2		4		90				<0.2		1.5	
IM4	Cloudy	Moderate	15:05	7.5	Surface	1.0	0.5	333	27.7	27.6	7.9	7.9	19.3	19.3	88.7	88.4	6.3	5.6	7.0	9.8	6	6	86	88	819736	804622	<0.2	<0.2	1.4	1.5
						1.0	0.5	359	27.5		7.9		19.3		88.1		6.3		7.4		6		86				<0.2		1.4	
					Middle	3.8	0.5	322	27.1	27.1	7.9	7.9	26.2	26.1	71.0	71.5	4.9		8.8		6		88				<0.2		1.5	
						3.8	0.5	337	27.1		7.9		26.1		71.9		4.9		8.7		6		88				<0.2		1.5	
					Bottom	6.5	0.2	349	26.6	26.6	7.8	7.8	27.2	27.2	69.4	69.6	4.8	4.8	13.4		7		90				<0.2		1.5	
						6.5	0.2	355	26.6		7.8		27.2		69.7		4.8		13.4		7		90				<0.2		1.5	
IM5	Cloudy	Moderate	14:57	7.4	Surface	1.0	0.5	298	28.5	28.5	7.8	7.8	15.4	15.4	85.3	85.3	6.1	5.8	5.4	11.6	8	7	86	88	820727	804878	<0.2	<0.2	1.4	1.5
						1.0	0.5	316	28.5		7.8		15.4		85.2		6.1		6.1		8		85				<0.2		1.5	
					Middle	3.7	0.3	304	28.0	28.0	7.8	7.8	18.9	18.9	76.7	76.7	5.4		12.1		6		87				<0.2		1.4	
						3.7	0.3	334	28.0		7.8		18.9		76.6		5.4		12.1		6		88				<0.2		1.5	
					Bottom	6.4	0.4	6	26.8	26.8	7.8	7.8	25.9	25.9	71.3	71.5	4.9	5.0	17.0		6		89				<0.2		1.5	
						6.4	0.4	6	26.8		7.8		25.9		71.7		5.0		16.7		6		90				<0.2		1.4	
IM6	Cloudy	Moderate	14:51	7.0	Surface	1.0	0.5	289	28.3	28.3	7.7	7.7	16.2	16.2	82.8	82.7	5.9	5.9	6.8	8.6	6	6	85	88	821064	805850	<0.2	<0.2	1.6	1.6
						1.0	0.5	309	28.3		7.7		16.3		82.6		5.9		7.2		6		86				<0.2		1.6	
					Middle	3.5	0.4	295	28.3	28.3	7.7	7.7	16.7	16.7	82.4	82.4	5.9		8.8		6		87				<0.2		1.6	
						3.5	0.4	308	28.3		7.7		16.7		82.4		5.9		8.8		6		88				<0.2		1.6	
					Bottom	6.0	0.2	288	28.2	28.2	7.7	7.7	17.0	17.0	83.8	84.0	6.0	6.0	10.2		7		90				<0.2		1.6	
						6.0	0.2	291	28.1		7.7		17.0		84.1		6.0		10.2		7		91				<0.2		1.6	
IM7	Rainy	Moderate	14:41	7.5	Surface	1.0	0.6	227	28.3	28.3	7.7	7.7	15.5	15.6	82.1	82.0	5.9	5.8	6.2	7.3	7	6	86	88	821366	806852	<0.2	<0.2	1.6	1.6
						1.0	0.6	233	28.3		7.7		15.7		81.9		5.8		6.3		7		85				<0.2		1.6	
					Middle	3.8	0.6	240	28.2	28.2	7.7	7.7	16.5	16.5	81.2	81.2	5.8		7.4		6		88				<0.2		1.5	
						3.8	0.6	259	28.2		7.7		16.5		81.2		5.8		7.4		6		87				<0.2		1.7	
					Bottom	6.5	0.4	249	28.2	28.2	7.8	7.8	16.5	16.5	82.4	82.5	5.9	5.9	8.2		5		90				<0.2		1.6	
						6.5	0.4	269	28.2		7.8		16.5		82.5		5.9		8.3		5		89				<0.2		1.6	
IM8	Cloudy	Moderate	15:02	7.3	Surface	1.0	0.3	213	28.5	28.5	7.9	7.9	13.4	13.4	85.7	85.7	6.2	6.2	5.8	7.4	4	4	84	89	821811	808134	<0.2	<0.2	1.5	1.4
						1.0	0.4	232	28.5		7.9		13.4		85.7		6.2		5.9		4		85				<0.2		1.5	
					Middle	3.7	0.3	222	28.4	28.4	7.9	7.9	14.3	14.3	85.5	85.5	6.1		7.9		4		88				<0.2		1.5	
						3.7	0.3	243	28.4		7.9		14.3		85.5		6.1		7.9		4		89				<0.2		1.5	
					Bottom	6.3	0.2	275	28.3	28.3	7.9	7.9	16.6	16.6	85.0	85.0	6.0	6.0	8.3		3		93				<0.2		1.3	
						6.3	0.2	284	28.3		7.9		16.6		84.9		6.0		8.5		3		92				<0.2		1.3	

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 02 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	15:07	6.9	Surface	1.0	0.2	252	28.6	28.6	7.9	7.9	14.1	14.1	88.3	88.2	6.3	6.3	5.4	7.5	3	3	84	89	822107	808811	<0.2	<0.2	1.2	1.4
						1.0	0.2	271	28.6		7.9		14.1		88.1		6.3		5.5		3		88				<0.2		1.4	
					Middle	3.5	0.2	282	28.3	28.3	7.9	7.9	15.7	15.7	87.4	87.4	6.2		8.2		3		89				<0.2		1.3	
						3.5	0.2	290	28.2		7.9		15.7		87.3		6.2		8.1		3		88				<0.2		1.3	
					Bottom	5.9	0.2	305	28.2	28.3	7.9	7.9	18.0	18.0	81.6	81.7	5.8	5.8	8.7		3		93				<0.2		1.6	
						5.9	0.2	317	28.3		7.9		18.0		81.8		5.8		8.9		3		93				<0.2		1.4	
IM10	Cloudy	Moderate	15:15	7.0	Surface	1.0	0.3	325	28.5	28.5	8.0	8.0	15.1	15.0	88.1	88.0	6.3	6.3	6.9	8.4	4	4	84	89	822399	809781	<0.2	<0.2	1.7	1.6
						1.0	0.3	343	28.5		8.0		14.9		87.9		6.3		6.9		5		84				<0.2		1.6	
					Middle	3.5	0.3	322	28.2	28.2	8.0	8.0	17.1	17.1	87.2	87.0	6.2		8.4		4		89				<0.2		1.5	
						3.5	0.3	335	28.2		8.0		17.1		86.7		6.2		8.7		4		89				<0.2		1.5	
					Bottom	6.0	0.3	317	28.1	28.1	7.9	7.9	18.4	18.4	81.2	81.3	5.7	5.7	9.8		4		92				<0.2		1.6	
						6.0	0.3	323	28.1		7.9		18.4		81.4		5.7		9.7		4		93				<0.2		1.6	
IM11	Rainy	Moderate	15:25	8.0	Surface	1.0	0.1	322	28.4	28.4	8.0	8.0	16.6	16.6	90.2	90.2	6.4	6.1	5.7	7.0	4	4	85	89	822064	811459	<0.2	<0.2	1.6	1.7
						1.0	0.1	354	28.4		8.0		16.6		90.1		6.4		5.8		4		84				<0.2		1.8	
					Middle	4.0	0.4	318	28.0	28.0	7.9	7.9	18.1	18.1	81.5	81.5	5.8		7.1		4		89				<0.2		1.6	
						4.0	0.4	327	27.9		7.9		18.1		81.4		5.8		7.1		4		89				<0.2		1.7	
					Bottom	7.0	0.5	302	27.8	27.8	7.9	7.9	19.8	19.8	77.6	77.8	5.5	5.5	8.3		3		93				<0.2		1.7	
						7.0	0.5	318	27.8		7.9		19.8		77.9		5.5		8.2		3		92				<0.2		1.6	
IM12	Rainy	Moderate	15:32	9.2	Surface	1.0	0.3	294	28.2	28.2	8.0	7.9	17.6	17.6	83.9	83.9	5.9	5.7	5.6	7.1	5	4	84	88	821466	812023	<0.2	<0.2	1.9	1.9
						1.0	0.4	312	28.2		7.9		17.6		83.8		5.9		5.6		5		84				<0.2		1.9	
					Middle	4.6	0.4	289	28.0	28.0	7.9	7.9	19.0	19.0	77.3	77.3	5.5		6.6		4		89				<0.2		1.8	
						4.6	0.5	314	28.0		7.9		19.0		77.3		5.5		6.6		4		88				<0.2		1.9	
					Bottom	8.2	0.4	287	26.9	27.0	7.9	7.9	25.2	25.1	66.8	66.9	4.6	4.6	8.9		4		92				<0.2		1.8	
						8.2	0.4	290	27.0		7.9		25.0		66.9		4.6		9.0		4		92				<0.2		1.8	
SR1A	Cloudy	Calm	15:49	5.5	Surface	1.0	-	-	28.4	28.4	8.0	8.0	17.5	17.5	90.9	90.8	6.4	6.4	5.6	6.6	2	3	-	-	819970	812654	-	-	-	-
						1.0	-	-	28.3		8.0		17.6		90.7		6.4		5.8		2		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	28.2	28.2	8.0	8.0	19.1	19.1	84.2	84.3	5.9	5.9	7.4		4		-				-		-	
						4.5	-	-	28.2		8.0		19.1		84.3		5.9		7.4		4		-				-		-	
SR2	Cloudy	Calm	16:01	4.6	Surface	1.0	0.1	339	28.3	28.3	8.0	8.0	17.6	17.6	90.4	90.4	6.4	6.4	6.7	8.4	3	4	84	86	821455	814181	<0.2	<0.2	1.8	1.8
						1.0	0.1	349	28.2		8.0		17.6		90.3		6.4		7.2		3		84				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	326	28.0	28.0	8.0	8.0	19.7	19.6	85.3	85.4	6.0	6.0	9.9		5		89				<0.2		1.8	
						3.6	0.2	334	28.0		8.0		19.6		85.5		6.0		9.9		5		88				<0.2		1.9	
SR3	Cloudy	Moderate	14:57	8.7	Surface	1.0	0.4	196	28.2	28.2	7.9	7.9	13.4	13.4	82.8	82.7	6.0	5.7	5.7	7.0	4	4	-	-	822123	807587	-	-	-	-
						1.0	0.4	209	28.2		7.9		13.4		82.6		6.0		5.8		4		-				-		-	
					Middle	4.4	0.3	195	27.9	27.9	7.9	7.9	18.2	18.2	76.3	76.4	5.4		7.3		4		-				-		-	
						4.4	0.3	205	27.9		7.9		18.2		76.4		5.4		7.2		4		-				-		-	
					Bottom	7.7	0.2	246	27.9	27.9	7.9	7.9	18.2	18.2	77.1	77.3	5.5	5.5	8.2		4		-				-		-	
						7.7	0.2	255	27.9		7.9		18.2		77.4		5.5		8.1		4		-				-		-	
SR4A	Rainy	Moderate	16:10	9.0	Surface	1.0	0.1	252	28.5	28.5	7.9	7.9	18.5	18.5	90.2	90.2	6.3	6.1	6.0	8.4	6	6	-	-	817165	807812	-	-	-	-
						1.0	0.1	275	28.5		7.9		18.5		90.1		6.3		6.1		7		-				-		-	
					Middle	4.5	0.1	229	28.2	28.2	7.8	7.8	19.7	19.6	82.5	82.6	5.8		7.4		6		-				-		-	
						4.5	0.1	244	28.2		7.8		19.6		82.7		5.8		7.3		6		-				-		-	
					Bottom	8.0	0.2	52	27.3	27.4	7.8	7.8	24.2	24.2	74.7	74.7	5.2	5.2	11.6		6		-				-		-	
						8.0	0.2	54	27.4		7.8		24.3		74.7		5.2		11.8		6		-				-		-	
SR5A	Rainy	Moderate	16:26	4.4	Surface	1.0	0.0	208	28.3	28.3	7.8	7.8	19.1	19.1	86.8	86.7	6.1	6.1	5.8	6.0	7	6	-	-	816585	810709	-	-	-	-
						1.0	0.0	214	28.3		7.8		19.1		86.5		6.1		5.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.1	68	28.2	28.2	7.8	7.8	19.4	19.3	86.1	86.3	6.0	6.1	6.2		5		-				-		-	
						3.4	0.1	74	28.2		7.8		19.3		86.4		6.1		6.2		5		-				-		-	
SR6A	Rainy	Moderate	17:07	4.3	Surface	1.0	0.0	209	28.2	28.2	7.7	7.7	18.7	18.7	87.4	87.5	6.1	6.2	5.3	5.4	4	5	-	-	817940	814748	-	-	-	-
						1.0	0.0	224	28.2		7.7		18.7		87.6		6.2		5.3		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	69	28.2	28.2	7.7	7.7	18.9	18.9	89.6	89.8	6.3	6.3	5.5		5		-				-		-	
						3.3	0.0	74	28.2		7.7		18.9		90.0		6.3		5.5		5		-				-		-	
SR7	Rainy	Moderate	16:56	19.0	Surface	1.0	0.1	325	27.5	27.5	8.0	8.0	22.2	22.1	77.2	77.2	5.4	5.2	3.7	4.5	4	3	-	-	823645	823725	-	-	-	-
						1.0	0.1	332	27.5		8.0		22.1		77.1		5.4		3.6		4		-				-		-	
					Middle	9.5	0.2	112	26.8	26.8	8.0	8.0	26.4	26.4	73.0	73.1	5.0		4.1		3		-				-		-	
						9.5	0.2	120	26.8		8.0		26.4		73.1		5.0		4.1		3		-				-		-	
					Bottom	18.0	0.1	64	26.0	26.1	8.0	8.0	30.0	29.9	69.7	69.8	4.8	4.8	6.0		3		-				-		-	
						18.0	0.1	65	26.1		8.0		29.9		69.8		4.8		5.7		3		-				-		-	
SR8	Cloudy	Calm	15:40	4.6	Surface	1.0	-	-	28.5	28.5	8.0	8.0	17.6	17.6	89.0	89.0	6.3	6.3	6.7	7.4	2	3	-	-	820411	811623	-	-	-	-
						1.0	-	-	28.5		8.0		17.7		88.9		6.3		6.8		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	28.5	28.5	7.9	7.9	17.7	17.7	89.5	89.6	6.3	6.3	7.9		4		-				-		-	
						3.6	-	-	28.5		7.9		17.7		89.7		6.3		8.1		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 04 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Rough	11:37	8.6	Surface	1.0	0.4	217	28.6	28.6	7.8	7.8	15.9	15.9	92.9	92.8	6.6	6.0	3.5	6.5	3	4	85	87	815597	804236	<0.2	<0.2	1.6	1.6
						1.0	0.4	237	28.6		7.8		15.9		92.7		6.6		3.6		3		85						1.7	
					Middle	4.3	0.8	190	27.2	27.2	7.8	7.8	23.3	23.3	75.3	75.3	5.3		5.9		4		87				<0.2		1.6	
						4.3	0.8	206	27.2		7.8		23.4		75.3		5.3		5.8		4		88				<0.2		1.5	
					Bottom	7.6	0.7	207	26.2	26.2	7.8	7.8	28.7	28.7	67.3	67.4	4.6	4.6	10.0		4		89				<0.2		1.6	
						7.6	0.7	208	26.2		7.8		28.7		67.4		4.6		10.3		4		90				<0.2		1.6	
C2	Cloudy	Moderate	13:18	11.1	Surface	1.0	1.4	166	28.8	28.7	7.9	7.9	10.5	10.4	84.7	84.6	6.2	5.8	6.8	8.9	4	6	84	87	825689	806931	<0.2	<0.2	2.2	2.2
						1.0	1.5	169	28.6		7.9		10.3		84.4		6.2		6.7		6		84				<0.2		2.1	
					Middle	5.6	1.1	160	27.9	27.9	7.8	7.8	18.6	18.6	75.6	75.5	5.4		8.3		5		88				<0.2		2.2	
						5.6	1.1	167	27.9		7.8		18.6		75.4		5.3		8.5		6		88				<0.2		2.1	
					Bottom	10.1	0.4	142	27.6	27.6	7.7	7.7	21.6	21.6	73.1	73.2	5.1	5.1	11.5		6		89				<0.2		2.2	
						10.1	0.4	153	27.6		7.7		21.6		73.3		5.1		11.6		6		90				<0.2		2.2	
C3	Fine	Moderate	10:52	12.8	Surface	1.0	0.2	128	27.7	27.7	8.0	8.0	22.0	22.0	80.8	80.8	5.6	5.5	4.1	6.3	5	5	83	87	822092	817791	<0.2	<0.2	1.5	1.5
						1.0	0.3	130	27.7		8.0		22.0		80.7		5.6		4.1		5		83				<0.2		1.4	
					Middle	6.4	0.2	88	27.1	27.1	7.9	7.9	23.5	23.5	76.9	76.9	5.4		6.9		5		87				<0.2		1.4	
						6.4	0.2	88	27.0		7.9		23.5		76.9		5.4		7.3		6		87				<0.2		1.5	
					Bottom	11.8	0.5	41	26.9	27.0	7.9	7.9	26.6	26.6	71.3	71.4	4.9	4.9	7.9		5		92				<0.2		1.4	
						11.8	0.5	44	27.0		7.9		26.6		71.5		4.9		7.6		6		92				<0.2		1.5	
IM1	Fine	Moderate	11:58	4.9	Surface	1.0	0.2	31	28.4	28.4	7.9	7.9	16.7	16.7	91.0	90.9	6.4	6.4	3.5	5.6	4	5	86	88	817971	807115	<0.2	<0.2	1.5	1.5
						1.0	0.2	31	28.4		7.9		16.7		90.7		6.4		4.0		4		87				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	308	26.5	26.5	7.9	7.9	27.4	27.4	73.9	74.2	5.1	5.1	7.5		5		89				<0.2		1.5	
						3.9	0.1	332	26.5		7.9		27.4		74.4		5.1		7.5		5		88				<0.2		1.6	
IM2	Fine	Moderate	12:06	7.2	Surface	1.0	0.3	158	27.6	27.6	7.8	7.8	20.9	20.9	78.3	78.3	5.5	5.1	5.1	8.3	4	3	84	86	818149	806175	<0.2	<0.2	1.4	1.5
						1.0	0.3	164	27.6		7.8		20.9		78.2		5.5		5.2		3		83				<0.2		1.5	
					Middle	3.6	0.2	159	26.4	26.5	7.8	7.8	27.3	27.3	67.1	67.2	4.6		8.4		3		85				<0.2		1.5	
						3.6	0.2	164	26.5		7.8		27.3		67.2		4.6		8.0		3		86				<0.2		1.5	
					Bottom	6.2	0.1	148	26.3	26.3	7.8	7.8	28.4	28.4	68.0	68.2	4.7	4.7	11.7		4		88				<0.2		1.5	
						6.2	0.1	157	26.3		7.8		28.4		68.3		4.7		11.2		3		88				<0.2		1.4	
IM3	Fine	Moderate	12:12	7.3	Surface	1.0	0.1	212	28.4	28.4	7.8	7.8	16.6	16.7	91.5	91.4	6.5	5.8	5.1	7.2	5	4	83	86	818782	805602	<0.2	<0.2	1.5	1.6
						1.0	0.1	225	28.4		7.8		16.7		91.3		6.5		5.3		4		82				<0.2		1.6	
					Middle	3.7	0.3	152	27.3	27.3	7.8	7.8	22.6	22.6	71.6	71.5	5.0		6.6		5		86				<0.2		1.5	
						3.7	0.3	153	27.2		7.8		22.6		71.4		5.0		6.4		5		86				<0.2		1.5	
					Bottom	6.3	0.2	146	26.6	26.6	7.8	7.8	26.6	26.6	69.4	69.6	4.8	4.8	10.2		4		89				<0.2		1.6	
						6.3	0.3	148	26.6		7.8		26.7		69.8		4.8		9.9		3		88				<0.2		1.6	
IM4	Fine	Moderate	12:23	8.0	Surface	1.0	1.0	202	28.0	28.0	7.8	7.8	19.6	19.6	77.3	77.3	5.4	5.4	8.3	13.3	7	8	82	85	819721	804591	<0.2	<0.2	1.4	1.5
						1.0	1.1	222	28.0		7.8		19.6		77.2		5.4		8.9		6		83				<0.2		1.5	
					Middle	4.0	0.9	194	27.9	27.9	7.8	7.8	20.0	20.1	76.9	76.9	5.4		13.6		8		86				<0.2		1.5	
						4.0	1.0	206	27.9		7.8		20.1		76.9		5.4		13.7		8		85				<0.2		1.5	
					Bottom	7.0	0.8	205	27.6	27.6	7.8	7.8	21.3	21.3	77.2	77.4	5.4	5.4	17.7		8		88				<0.2		1.4	
						7.0	0.8	210	27.6		7.8		21.3		77.6		5.4		17.7		8		88				<0.2		1.4	
IM5	Fine	Rough	12:34	7.4	Surface	1.0	1.1	212	28.9	28.9	7.8	7.8	17.2	17.2	91.5	91.5	6.4	6.3	4.3	5.4	7	6	83	86	820740	804861	<0.2	<0.2	1.4	1.5
						1.0	1.1	214	28.9		7.8		17.2		91.4		6.4		4.3		6		83				<0.2		1.5	
					Middle	3.7	1.1	216	28.6	28.6	7.8	7.8	17.8	17.8	87.7	87.7	6.2		4.8		6		87				<0.2		1.5	
						3.7	1.1	220	28.6		7.8		17.8		87.7		6.2		4.8		5		87				<0.2		1.4	
					Bottom	6.4	0.8	216	27.6	27.6	7.8	7.8	20.5	20.5	76.8	76.9	5.4	5.4	7.0		4		88				<0.2		1.5	
						6.4	0.9	219	27.6		7.8		20.5		76.9		5.4		7.3		5		88				<0.2		1.4	
IM6	Fine	Moderate	12:47	7.1	Surface	1.0	0.8	260	28.1	28.1	7.7	7.7	19.1	19.1	78.4	78.3	5.5	5.5	6.1	9.5	8	8	83	86	821064	805835	<0.2	<0.2	1.4	1.5
						1.0	0.9	268	28.1		7.7		19.1		78.2		5.5		6.3		7		82				<0.2		1.5	
					Middle	3.6	0.8	259	27.9	27.9	7.7	7.7	19.5	19.5	76.2	76.1	5.4		9.0		7		86				<0.2		1.5	
						3.6	0.8	271	27.9		7.7		19.5		76.0		5.4		9.3		8		87				<0.2		1.5	
					Bottom	6.1	0.7	252	27.7	27.7	7.7	7.7	20.7	20.7	74.0	74.1	5.2	5.2	13.0		7		88				<0.2		1.5	
						6.1	0.7	259	27.7		7.7		20.7		74.1		5.2		13.1		8		88				<0.2		1.5	
IM7	Fine	Rough	12:57	8.2	Surface	1.0	0.6	258	28.2	28.2	7.8	7.8	18.6	18.6	81.7	81.7	5.7	5.6	5.5	10.5	7	7	83	86	821327	806854	<0.2	<0.2	1.4	1.5
						1.0	0.7	271	28.2		7.8		18.6		81.6		5.7		5.5		8		83				<0.2		1.5	
					Middle	4.1	0.6	258	27.8	27.8	7.8	7.8	19.7	19.7	76.0	76.0	5.4		10.7		6		86				<0.2		1.6	
						4.1	0.7	266	27.7		7.8		19.7		75.9		5.4		11.0		6		86				<0.2		1.5	
					Bottom	7.2	0.6	266	27.6	27.6	7.8	7.8	20.4	20.4	75.4	75.5	5.3	5.3	15.0		6		88				<0.2		1.5	
						7.2	0.6	272	27.6		7.8		20.4		75.5		5.3		15.3		7		88				<0.2		1.5	
IM8	Cloudy	Moderate	12:46	7.5	Surface	1.0	0.3	195	28.3	28.3	7.9	7.9	17.7	17.7	87.8	87.8	6.2	5.9	6.4	12.0	4	5	83	86	821849	808132	<0.2	<0.2	1.5	1.5
						1.0	0.3	211	28.3		7.9		17.7		87.7		6.2		6.7		3		83				<0.2		1.4	
					Middle	3.8	0.4	190	27.8	27.8	7.8	7.8	19.4	19.4	78.3	78.3	5.5		13.2		6		85				<0.2		1.5	
						3.8	0.4	195	27.8		7.8		19.4		78.3		5.5		13.9		5		85				<0.2		1.5	
					Bottom	6.5	0.2	238	27.8	27.8	7.8	7.8	19.5	19.4	78.3	78.4	5.5	5.5	15.8		6		88				<0.2		1.6	
						6.5	0.2	241	27.8		7.8		19.4		78.5		5.5		15.8		6		89				<0.2		1.5	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 04 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Cloudy	Moderate	12:37	7.2	Surface	1.0	0.3	131	28.2	28.2	7.9	7.9	18.2	18.2	84.5	84.6	6.0	5.9	6.6	7.6	4	5	83	85	822096	808815	<0.2	<0.2	1.6	1.6
						1.0	0.3	143	28.2		7.9		18.2		84.6		6.0		6.8		4		83				<0.2		1.5	
					Middle	3.6	0.3	137	28.0	28.0	7.9	7.9	18.6	18.6	80.6	80.7	5.7		8.2		4		84				<0.2		1.5	
						3.6	0.3	142	28.0		7.9		18.6		80.7		5.7		8.1		4		84				<0.2		1.5	
					Bottom	6.2	0.2	109	27.7	27.7	7.8	7.8	19.8	19.8	77.7	77.8	5.5	5.5	8.1		6		88				<0.2		1.6	
						6.2	0.2	114	27.7		7.8		19.7		77.8		5.5		8.2		5		88				<0.2		1.6	
IM10	Cloudy	Moderate	12:28	7.5	Surface	1.0	0.7	117	28.2	28.2	7.9	7.9	17.8	17.8	84.6	84.6	6.0	5.8	6.2	10.7	6	6	83	85	822403	809781	<0.2	<0.2	1.6	1.6
						1.0	0.8	121	28.2		7.9		17.8		84.6		6.0		6.4		6		83				<0.2		1.6	
					Middle	3.8	0.7	116	27.8	27.8	7.8	7.8	19.2	19.2	78.1	78.1	5.5		11.6		6		84				<0.2		1.4	
						3.8	0.8	117	27.8		7.8		19.3		78.0		5.5		12.1		5		84				<0.2		1.6	
					Bottom	6.5	0.5	111	27.8	27.8	7.8	7.7	19.5	19.5	78.9	79.1	5.6	5.6	14.1		6		87				<0.2		1.6	
						6.5	0.6	118	27.8		7.7		19.5		79.2		5.6		14.0		5		88				<0.2		1.6	
IM11	Cloudy	Moderate	12:14	9.0	Surface	1.0	0.8	112	28.3	28.3	7.9	7.9	16.9	16.9	87.2	87.2	6.2	6.0	5.3	7.7	6	6	84	86	822055	811437	<0.2	<0.2	1.5	1.6
						1.0	0.8	118	28.2		7.9		17.0		87.1		6.2		5.3		6		85				<0.2		1.6	
					Middle	4.5	0.7	110	27.9	27.9	7.9	7.9	18.7	18.7	80.8	80.8	5.7		6.2		6		87				<0.2		1.5	
						4.5	0.7	113	27.9		7.9		18.7		80.7		5.7		6.4		6		83				<0.2		1.6	
					Bottom	8.0	0.5	103	27.9	27.9	7.8	7.8	18.8	18.8	81.5	81.7	5.8	5.8	11.1		6		88				<0.2		1.6	
						8.0	0.5	110	27.9		7.8		18.8		81.8		5.8		11.7		4		88				<0.2		1.5	
IM12	Fine	Moderate	12:03	9.4	Surface	1.0	0.7	106	28.0	28.0	7.9	7.9	18.9	18.9	80.2	80.1	5.7	5.6	11.3	11.3	9	9	84	88	821461	812030	<0.2	<0.2	1.4	1.4
						1.0	0.7	113	27.9		7.9		19.0		80.0		5.6		11.1		8		84				<0.2		1.4	
					Middle	4.7	0.5	101	27.8	27.8	7.9	7.9	19.3	19.4	78.6	78.6	5.5		10.3		8		88				<0.2		1.5	
						4.7	0.5	109	27.8		7.9		19.4		78.5		5.5		10.5		10		88				<0.2		1.4	
					Bottom	8.4	0.4	81	27.7	27.7	7.8	7.8	20.1	20.1	77.2	77.2	5.4	5.4	12.2		9		92				<0.2		1.4	
						8.4	0.4	85	27.7		7.8		20.1		77.2		5.4		12.3		10		92				<0.2		1.5	
SR1A	Fine	Calm	11:44	5.0	Surface	1.0	-	-	28.3	28.3	7.9	7.9	18.6	18.6	83.3	83.3	5.9	5.9	7.2	6.7	7	6	-	-	819980	812659	-	-	-	-
						1.0	-	-	28.3		7.9		18.6		83.3		5.9		7.2		6		-				-		-	
					Middle	2.5	-	-	-	-		-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-				-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.9	28.0	7.8	7.8	20.5	20.5	78.9	78.9	5.5	5.5	6.2		5		-				-		-	
						4.0	-	-	28.0		7.8		20.4		78.9		5.5		6.2		6		-				-		-	
SR2	Fine	Moderate	11:28	4.7	Surface	1.0	0.5	103	27.9	27.9	7.8	7.8	19.1	19.2	80.6	80.5	5.7	5.7	7.3	7.7	4	5	86	89	821440	814158	<0.2	<0.2	1.6	1.6
						1.0	0.5	107	27.9		7.8		19.2		80.3		5.7		7.4		4		87				<0.2		1.6	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.4	100	27.8	27.8	7.8	7.7	19.6	19.6	80.6	80.8	5.7	5.7	8.0		5		90				<0.2		1.6	
						3.7	0.4	105	27.8		7.7		19.6		80.9		5.7		8.1		5		91				<0.2		1.5	
SR3	Cloudy	Moderate	12:52	8.7	Surface	1.0	0.4	203	28.3	28.3	7.9	7.9	18.3	18.3	84.6	84.6	6.0	5.8	6.3	8.0	4	5	-	-	822164	807571	-	-	-	-
						1.0	0.5	208	28.3		7.9		18.3		84.6		6.0		6.4		5		-				-		-	
					Middle	4.4	0.5	200	27.9	27.9	7.9	7.9	18.9	19.0	79.0	78.9	5.6		7.6		4		-				-		-	
						4.4	0.5	218	27.9		7.9		19.0		78.8		5.6		7.7		5		-				-		-	
					Bottom	7.7	0.3	228	27.9	27.9	7.9	7.9	19.2	19.2	78.0	78.1	5.5	5.5	9.9		6		-				-		-	
						7.7	0.3	234	27.9		7.9		19.2		78.2		5.5		9.9		6		-				-		-	
SR4A	Fine	Calm	11:16	9.1	Surface	1.0	0.1	296	28.1	28.1	7.8	7.8	18.5	18.4	81.8	81.6	5.8	5.2	5.9	7.7	4	5	-	-	817175	807822	-	-	-	-
						1.0	0.1	298	28.1		7.8		18.4		81.4		5.7		5.8		4		-				-		-	
					Middle	4.6	0.2	79	26.5	26.5	7.8	7.8	26.8	26.8	68.6	68.6	4.7		7.8		5		-				-		-	
						4.6	0.2	83	26.5		7.8		26.8		68.6		4.7		7.9		4		-				-		-	
					Bottom	8.1	0.2	63	26.4	26.4	7.8	7.8	27.5	27.5	67.1	67.1	4.6	4.6	9.4		5		-				-		-	
						8.1	0.2	68	26.4		7.8		27.5		67.1		4.6		9.5		6		-				-		-	
SR5A	Fine	Calm	10:59	3.6	Surface	1.0	0.1	82	28.5	28.5	7.8	7.8	17.2	17.2	87.0	87.0	6.1	6.1	5.8	6.2	8	9	-	-	816572	810694	-	-	-	-
						1.0	0.1	86	28.5		7.8		17.2		86.9		6.1		5.9		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	95	28.5	28.5	7.8	7.8	17.7	17.7	86.3	86.3	6.1	6.1	6.6		9		-				-		-	
						2.6	0.1	96	28.5		7.8		17.7		86.3		6.1		6.6		9		-				-		-	
SR6A	Fine	Calm	10:26	4.3	Surface	1.0	0.1	16	28.2	28.2	7.8	7.8	19.0	19.0	80.0	80.0	5.6	5.6	8.6	8.7	5	4	-	-	817971	814738	-	-	-	-
						1.0	0.1	16	28.2		7.8		19.0		80.0		5.6		8.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	7	28.1	28.1	7.7	7.7	19.0	19.0	79.9	80.0	5.6	5.6	8.6		3		-				-		-	
						3.3	0.1	7	28.1		7.7		19.0		80.0		5.6		8.7		4		-				-		-	
SR7	Fine	Moderate	10:09	16.1	Surface	1.0	0.7	56	27.1	27.1	8.0	8.0	24.2	24.2	78.1	78.1	5.4	5.3	3.5	4.0	3	3	-	-	823622	823719	-	-	-	-
						1.0	0.8	60	27.1		8.0		24.2		78.0		5.4		3.6		2		-				-		-	
					Middle	8.1	0.6	49	26.8	26.8	8.0	8.0	26.0	25.9	73.1	73.3	5.1		4.0		3		-				-		-	
						8.1	0.7	51	26.8		8.0		25.8		73.4		5.1		3.9		3		-				-		-	
					Bottom	15.1	0.5	21	26.7	26.7	7.9	7.9	26.7	26.6	70.5	70.7	4.9	4.9	4.4		2		-				-		-	
						15.1	0.5	22	26.7		7.9		26.5		70.8		4.9		4.4		2		-				-		-	
SR8	Fine	Moderate	11:55	4.8	Surface	1.0	-	-	28.2	28.2	7.9	7.9	18.8	18.8	81.0	81.0	5.7	5.7	7.0	7.0	6	6	-	-	820386	811617	-	-	-	-
						1.0	-	-	28.2		7.9		18.8		81.0		5.7		7.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.1	28.1	7.8	7.8	19.1	19.1	80.5	80.6	5.7	5.7	6.9		6		-				-		-	
						3.8	-	-	28.1		7.8		19.1		80.6		5.7		7.0		5		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 04 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	18:10	8.1	Surface	1.0	0.7	17	28.8	28.8	7.8	7.8	17.1	17.1	90.0	90.0	6.3	6.1	7.0	10.1	9	8	84	87	815638	804265	<0.2	<0.2	1.5	1.5
						1.0	0.7	17	28.8		7.8		17.1		89.9		6.3		7.0		9		84				<0.2		1.5	
					Middle	4.1	0.5	8	28.4	28.4	7.8	7.8	18.7	18.7	84.5	84.5	5.9		10.2		7		87				<0.2		1.6	
						4.1	0.6	8	28.4		7.8		18.7		84.5		5.9		10.1		8		88				<0.2		1.5	
					Bottom	7.1	0.5	20	27.4	27.4	7.8	7.8	22.6	22.6	75.6	75.7	5.3	5.3	13.5		7		89				<0.2		1.5	
						7.1	0.5	20	27.4		7.8		22.6		75.7		5.3		13.0		8		90				<0.2		1.5	
C2	Fine	Rough	16:56	11.2	Surface	1.0	0.7	184	28.9	28.9	7.9	7.9	10.7	10.7	86.5	86.4	6.3	5.6	8.0	9.8	5	7	85	88	825665	806931	<0.2	<0.2	2.2	2.3
						1.0	0.7	198	28.9		7.9		10.7		86.3		6.3		8.0		6		86				<0.2		2.2	
					Middle	5.6	0.2	176	27.5	27.5	7.8	7.8	19.9	19.9	67.8	67.8	4.8		9.3		8		89				<0.2		2.3	
						5.6	0.3	188	27.5		7.8		19.9		67.7		4.8		9.3		7		89				<0.2		2.2	
					Bottom	10.2	0.2	350	27.4	27.4	7.7	7.7	21.5	21.5	67.2	67.3	4.7	4.7	12.1		8		90				<0.2		2.4	
						10.2	0.2	353	27.4		7.7		21.5		67.3		4.7		12.0		9		90				<0.2		2.2	
C3	Fine	Moderate	18:59	12.1	Surface	1.0	0.5	240	28.0	28.0	8.0	8.0	20.2	20.1	76.9	77.0	5.4	5.2	4.7	6.6	6	5	86	88	822108	817821	<0.2	<0.2	1.5	1.7
						1.0	0.5	245	28.0		8.0		20.0		77.1		5.4		4.7		5		86				<0.2		1.5	
					Middle	6.1	0.5	252	27.1	27.1	7.9	7.9	24.4	24.5	70.9	70.7	4.9		5.2		5		89				<0.2		1.6	
						6.1	0.6	268	27.0		7.9		24.6		70.5		4.9		5.7		6		89				<0.2		1.7	
					Bottom	11.1	0.3	259	26.7	26.7	7.9	7.8	26.0	26.0	69.3	69.3	4.8	4.8	9.6		5		90				<0.2		1.8	
						11.1	0.3	272	26.7		7.8		26.0		69.3		4.8		9.6		4		90				<0.2		1.9	
IM1	Fine	Moderate	17:47	4.6	Surface	1.0	0.2	4	29.0	29.0	7.9	7.9	17.3	17.3	98.6	98.5	6.9	6.9	4.7	8.5	10	11	85	86	817961	807119	<0.2	<0.2	1.4	1.5
						1.0	0.2	4	28.9		7.9		17.3		98.4		6.9		5.4		11		85				<0.2		1.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	343	27.9	27.9	7.9	7.9	21.0	21.0	85.0	85.1	5.9	5.9	11.7		12		87				<0.2		1.5	
						3.6	0.2	358	27.9		7.9		21.1		85.2		5.9		12.1		12		88				<0.2		1.5	
IM2	Fine	Moderate	17:39	6.5	Surface	1.0	0.5	2	28.7	28.7	7.8	7.8	18.4	18.4	87.9	87.9	6.1	5.9	5.9	10.1	8	8	83	86	818185	806157	<0.2	<0.2	1.5	1.6
						1.0	0.5	2	28.7		7.8		18.5		87.8		6.1		6.0		7		83				<0.2		1.6	
					Middle	3.3	0.5	348	28.0	28.0	7.8	7.8	21.3	21.3	82.6	82.6	5.7		9.2		8		86				<0.2		1.5	
						3.3	0.5	320	28.0		7.8		21.3		82.6		5.7		9.3		8		86				<0.2		1.5	
					Bottom	5.5	0.5	359	27.6	27.6	7.8	7.8	24.1	24.2	77.0	77.1	5.3	5.3	15.3		7		89				<0.2		1.6	
						5.5	0.5	330	27.6		7.8		24.2		77.2		5.3		14.9		7		89				<0.2		1.6	
IM3	Fine	Rough	17:31	6.7	Surface	1.0	0.7	324	28.7	28.7	7.8	7.8	20.2	20.2	86.7	86.6	6.0	5.7	5.6	7.5	6	7	82	86	818767	805615	<0.2	<0.2	1.4	1.4
						1.0	0.7	349	28.7		7.8		20.2		86.5		6.0		5.6		7		83				<0.2		1.4	
					Middle	3.4	0.6	336	27.8	27.8	7.8	7.8	21.3	21.3	77.5	77.6	5.4		6.3		7		86				<0.2		1.4	
						3.4	0.6	355	27.8		7.8		21.3		77.6		5.4		6.3		6		87				<0.2		1.4	
					Bottom	5.7	0.6	337	26.8	26.8	7.8	7.8	26.2	26.2	69.3	69.4	4.8	4.8	10.6		6		88				<0.2		1.4	
						5.7	0.7	341	26.8		7.8		26.2		69.5		4.8		10.7		7		88				<0.2		1.5	
IM4	Fine	Moderate	17:17	7.4	Surface	1.0	0.8	323	28.8	28.8	7.8	7.8	19.2	19.2	92.7	92.6	6.4	6.0	4.7	8.2	5	6	83	86	819739	804608	<0.2	<0.2	1.4	1.6
						1.0	0.8	345	28.7		7.8		19.2		92.5		6.4		5.0		5		83				<0.2		1.4	
					Middle	3.7	0.7	322	27.9	27.9	7.8	7.8	21.3	21.3	80.4	80.4	5.6		7.1		6		85				<0.2		1.4	
						3.7	0.7	331	27.9		7.8		21.3		80.4		5.6		7.2		7		86				<0.2		1.4	
					Bottom	6.4	0.6	324	26.9	26.9	7.8	7.8	25.4	25.4	72.2	72.3	5.0	5.0	12.4		6		88				<0.2		1.9	
						6.4	0.6	350	26.9		7.8		25.4		72.4		5.0		12.4		7		88				<0.2		2.1	
IM5	Fine	Moderate	17:07	6.8	Surface	1.0	0.4	321	29.0	29.0	7.8	7.8	14.1	14.1	88.8	88.8	6.3	6.3	7.2	9.3	8	7	83	86	820754	804877	<0.2	<0.2	2.0	2.0
						1.0	0.4	331	29.0		7.8		14.1		88.8		6.3		7.2		8		83				<0.2		2.1	
					Middle	3.4	0.5	344	28.5	28.5	7.8	7.8	19.7	19.7	88.5	88.5	6.2		8.5		7		87				<0.2		2.0	
						3.4	0.6	349	28.5		7.8		19.7		88.4		6.2		8.9		7		86				<0.2		2.0	
					Bottom	5.8	0.5	353	28.1	28.1	7.9	7.9	21.0	21.0	86.5	86.6	6.0	6.0	11.8		6		88				<0.2		2.0	
						5.8	0.5	354	28.1		7.9		21.0		86.7		6.0		11.8		8		88				<0.2		1.9	
IM6	Fine	Moderate	17:00	6.5	Surface	1.0	0.6	286	29.1	29.1	7.7	7.7	12.6	12.5	88.2	88.2	6.3	6.2	5.6	6.9	8	8	82	85	821075	805845	<0.2	<0.2	2.1	2.1
						1.0	0.6	306	29.1		7.7		12.5		88.1		6.3		5.6		8		83				<0.2		2.0	
					Middle	3.3	0.5	282	28.9	28.9	7.7	7.7	13.8	13.8	85.3	85.3	6.1		6.9		8		85				<0.2		2.1	
						3.3	0.5	293	28.9		7.7		13.8		85.3		6.1		7.0		7		86				<0.2		2.0	
					Bottom	5.5	0.4	274	28.8	28.8	7.7	7.7	14.3	14.3	85.2	85.3	6.1	6.1	8.2		7		87				<0.2		2.1	
						5.5	0.4	274	28.8		7.7		14.3		85.4		6.1		8.2		7		88				<0.2		2.1	
IM7	Fine	Moderate	16:53	7.9	Surface	1.0	0.7	234	29.0	29.0	7.7	7.7	11.9	11.9	84.2	84.2	6.1	5.8	5.9	8.0	6	6	82	86	821340	806824	<0.2	<0.2	2.0	1.9
						1.0	0.7	252	29.0		7.7		11.9		84.1		6.1		6.1		5		83				<0.2		1.9	
					Middle	4.0	0.6	247	28.4	28.4	7.7	7.7	15.7	15.7	77.5	77.5	5.5		7.7		7		86				<0.2		1.9	
						4.0	0.6	270	28.4		7.7		15.7		77.5		5.5		7.7		6		86				<0.2		1.9	
					Bottom	6.9	0.6	261	28.3	28.3	7.7	7.7	16.8	16.8	78.6	78.8	5.6	5.6	10.2		6		88				<0.2		2.0	
						6.9	0.7	266	28.3		7.7		16.8		79.0		5.6		10.2		7		88				<0.2		1.9	
IM8	Fine	Moderate	17:23	7.1	Surface	1.0	0.2	217	29.1	29.1	7.8	7.8	12.1	12.0	89.1	89.0	6.4	6.4	6.0	6.9	4	5	85	88	821825	808122	<0.2	<0.2	2.3	2.2
						1.0	0.2	236	29.1		7.8		12.0		88.8		6.4		6.0		4		85				<0.2		2.3	
					Middle	3.6	0.2	229	29.0	29.0	7.8	7.8	12.8	12.8	88.3	88.3	6.3		6.2		4		89				<0.2		2.1	
						3.6	0.2	242	28.9		7.8		12.8		88.2		6.3		6.2		5		89				<0.2		2.2	
					Bottom	6.1	0.2	253	28.5	28.5	7.8	7.8	17.0	17.0	81.7	81.8	5.8	5.8	8.6		5		90				<0.2		2.1	
						6.1	0.2	263	28.5		7.8		16.9		81.9		5.8		8.5		6		90				<0.2		2.2	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 04 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	17:32	6.5	Surface	1.0	0.2	226	29.3	29.3	7.8	7.8	10.6	10.6	91.5	91.4	6.6	6.5	5.8	6.5	4	4	82	85	822109	808825	<0.2	<0.2	2.6	2.5
						1.0	0.2	241	29.3		7.8		10.6		91.3		6.6		5.9		5		82				<0.2		2.6	
					Middle	3.3	0.2	271	29.1	29.1	7.7	7.7	12.3	12.3	88.7	88.6	6.4		6.6		5		85				<0.2		2.5	
						3.3	0.2	273	29.1		7.7		12.3		88.5		6.4		6.7		4		85				<0.2		2.4	
					Bottom	5.5	0.1	313	29.2	29.2	7.7	7.7	13.4	13.4	87.2	87.1	6.2	6.2	7.0		4		88				<0.2		2.4	
						5.5	0.1	321	29.2		7.7		13.4		87.0		6.2		7.0		4		88				<0.2		2.3	
IM10	Fine	Moderate	17:41	6.4	Surface	1.0	0.4	311	29.0	29.0	7.9	7.9	13.7	13.6	90.1	90.0	6.4	6.3	6.6	8.7	4	4	85	88	822373	809806	<0.2	<0.2	2.2	2.3
						1.0	0.4	335	29.0		7.9		13.6		89.9		6.4		6.8		4		85				<0.2		2.3	
					Middle	3.2	0.5	307	28.8	28.8	7.8	7.8	16.1	16.1	88.5	88.5	6.3		8.7		4		88				<0.2		2.2	
						3.2	0.5	322	28.8		7.8		16.1		88.4		6.2		8.9		4		88				<0.2		2.4	
					Bottom	5.4	0.4	298	28.7	28.7	7.8	7.8	16.4	16.4	87.6	87.6	6.2	6.2	10.6		4		90				<0.2		2.3	
						5.4	0.4	307	28.7		7.8		16.4		87.6		6.2		10.5		4		90				<0.2		2.4	
IM11	Fine	Moderate	17:53	6.3	Surface	1.0	0.6	317	28.8	28.8	7.9	7.9	14.1	14.2	86.8	86.6	6.2	6.0	6.3	7.6	4	5	84	88	822033	811460	<0.2	<0.2	2.0	1.9
						1.0	0.6	335	28.8		7.9		14.2		86.4		6.2		6.3		5		85				<0.2		2.0	
					Middle	3.2	0.7	305	27.9	27.9	7.8	7.8	17.6	17.5	82.0	81.9	5.8		7.1		5		88				<0.2		1.8	
						3.2	0.7	311	27.9		7.8		17.5		81.8		5.8		6.7		6		89				<0.2		1.9	
					Bottom	5.3	0.3	285	27.6	27.6	7.7	7.7	21.9	21.9	77.9	78.4	5.4	5.5	9.9		5		90				<0.2		1.9	
						5.3	0.3	292	27.6		7.6		21.9		78.8		5.5		9.2		5		90				<0.2		1.8	
IM12	Fine	Moderate	18:02	7.8	Surface	1.0	0.6	290	28.7	28.7	7.9	7.9	17.0	17.0	86.7	86.6	6.1	6.0	5.9	7.3	5	6	85	88	821460	812037	<0.2	<0.2	1.8	1.9
						1.0	0.6	293	28.6		7.9		16.9		86.5		6.1		6.0		6		85				<0.2		1.9	
					Middle	3.9	0.5	272	28.5	28.5	7.9	7.9	19.7	19.7	85.3	85.3	5.9		8.5		6		88				<0.2		1.8	
						3.9	0.5	296	28.5		7.9		19.8		85.3		5.9		8.6		5		88				<0.2		1.9	
					Bottom	6.8	0.4	282	28.5	28.5	7.8	7.8	19.9	19.9	85.3	85.3	5.9	5.9	7.4		6		90				<0.2		1.9	
						6.8	0.4	310	28.5		7.8		19.9		85.3		5.9		7.1		6		90				<0.2		1.8	
SR1A	Fine	Moderate	18:21	4.7	Surface	1.0	-	-	28.9	28.9	7.9	7.9	16.0	16.0	92.2	92.3	6.5	6.5	5.8	5.6	6	6	-	-	819979	812657	-	-	-	-
						1.0	-	-	28.9		7.9		15.9		92.3		6.5		5.7		5		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	29.0	29.0	7.8	7.8	18.7	18.6	92.9	93.0	6.4	6.5	5.5		5		-				-		-	
						3.7	-	-	29.0		7.8		18.6		93.0		6.5		5.5		6		-				-		-	
SR2	Fine	Moderate	18:34	4.4	Surface	1.0	0.2	316	28.2	28.2	7.9	7.9	18.8	18.8	81.7	81.5	5.7	5.7	12.0	13.1	6	6	84	87	821456	814187	<0.2	<0.2	1.9	1.9
						1.0	0.2	320	28.1		7.9		18.9		81.3		5.7		12.3		6		84				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.2	323	28.2	28.3	7.8	7.7	20.5	20.5	80.4	80.6	5.6	5.6	14.0		5		89				<0.2		1.9	
						3.4	0.2	337	28.3		7.7		20.5		80.7		5.6		14.0		5		89				<0.2		1.9	
SR3	Fine	Moderate	17:14	8.0	Surface	1.0	0.3	212	29.3	29.3	7.8	7.8	10.8	10.8	89.4	89.4	6.5	6.3	5.8	8.4	5	5	-	-	822146	807549	-	-	-	-
						1.0	0.3	231	29.2		7.8		10.8		89.3		6.5		6.0		6		-				-		-	
					Middle	4.0	0.4	219	28.6	28.6	7.8	7.8	13.3	13.3	83.2	83.1	6.0		7.9		5		-				-		-	
						4.0	0.4	225	28.5		7.8		13.3		83.0		6.0		8.0		5		-				-		-	
					Bottom	7.0	0.3	247	28.2	28.2	7.7	7.7	16.6	16.6	76.6	76.7	5.5	5.5	11.5		6		-				-		-	
						7.0	0.3	250	28.2		7.7		16.6		76.7		5.5		11.4		5		-				-		-	
SR4A	Cloudy	Calm	18:28	9.0	Surface	1.0	0.1	68	28.7	28.7	7.8	7.8	19.0	19.0	85.7	85.7	6.0	6.0	10.2	12.6	9	12	-	-	817195	807824	-	-	-	-
						1.0	0.1	68	28.7		7.8		19.0		85.7		6.0		10.4		10		-				-		-	
					Middle	4.5	0.1	82	28.6	28.6	7.8	7.8	19.0	19.0	84.4	84.4	5.9		13.0		12		-				-		-	
						4.5	0.1	86	28.6		7.8		19.0		84.3		5.9		13.6		12		-				-		-	
					Bottom	8.0	0.1	83	28.6	28.6	7.8	7.8	19.0	19.0	84.2	84.3	5.9	5.9	14.2		13		-				-		-	
						8.0	0.1	90	28.6		7.8		19.0		84.3		5.9		14.0		14		-				-		-	
SR5A	Cloudy	Calm	18:45	3.3	Surface	1.0	0.1	7	28.9	28.9	7.8	7.8	19.4	19.4	90.1	90.1	6.2	6.2	10.2	10.7	11	11	-	-	816571	810700	-	-	-	-
						1.0	0.1	7	28.9		7.8		19.4		90.1		6.2		10.4		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.0	58	28.9	28.9	7.9	7.9	19.4	19.4	90.1	90.2	6.2	6.2	11.1		12		-				-		-	
						2.3	0.0	60	28.9		7.9		19.4		90.2		6.2		11.1		11		-				-		-	
SR6A	Cloudy	Calm	19:17	3.9	Surface	1.0	0.1	202	28.7	28.7	7.8	7.8	18.6	18.6	89.6	89.6	6.3	6.3	5.0	6.4	6	6	-	-	817972	814724	-	-	-	-
						1.0	0.1	220	28.7		7.8		18.6		89.6		6.3		5.0		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	296	28.9	28.9	7.9	7.9	19.6	19.6	90.7	90.7	6.3	6.3	7.7		5		-				-		-	
						2.9	0.0	304	28.9		7.9		19.6		90.6		6.3		7.8		6		-				-		-	
SR7	Fine	Moderate	19:33	15.7	Surface	1.0	0.0	241	27.4	27.4	8.0	8.0	23.8	23.8	81.5	81.6	5.7	5.3	4.3	6.6	3	3	-	-	823640	823757	-	-	-	-
						1.0	0.0	264	27.4		8.0		23.8		81.7		5.7		3.9		4		-				-		-	
					Middle	7.9	0.0	225	26.7	26.7	7.9	7.9	26.7	26.7	71.0	71.0	4.9		7.2		2		-				-		-	
						7.9	0.0	244	26.7		7.9		26.7		71.0		4.9		7.2		3		-				-		-	
					Bottom	14.7	0.1	111	26.2	26.2	7.8	7.8	28.6	28.6	68.1	68.2	4.7	4.7	8.8		3		-				-		-	
						14.7	0.1	115	26.2		7.8		28.6		68.2		4.7		8.5		2		-				-		-	
SR8	Fine	Moderate	18:11	4.6	Surface	1.0	-	-	29.2	29.2	8.0	8.0	15.5	15.5	90.8	90.8	6.4	6.4	7.0	9.1	5	8	-	-	820370	811610	-	-	-	-
						1.0	-	-	29.2		8.0		15.5		90.7		6.4		7.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	28.8	28.8	7.9	7.9	17.6	17.5	87.1	87.2	6.1	6.1	11.2		11		-				-		-	
						3.6	-	-	28.8		7.9		17.5		87.3		6.1		11.2		11		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	13:38	8.4	Surface	1.0	0.5	214	28.0	28.0	8.0	8.0	19.0	18.9	84.9	84.9	6.0	5.4	7.5	9.8	9	9	85	88	815629	804267	<0.2	<0.2	1.4	1.4
						1.0	0.5	224	28.0		8.0		18.9		84.8		6.0		7.5		9		86				<0.2		1.4	
					Middle	4.2	0.8	196	26.8	26.8	8.0	8.0	24.8	24.3	67.9	67.9	4.7		9.5		10		87				<0.2		1.4	
						4.2	0.8	203	26.8		8.0		23.8		67.8		4.8		9.2		9		88				<0.2		1.4	
					Bottom	7.4	0.5	214	26.2	26.2	7.9	7.9	27.6	27.6	63.8	63.9	4.4	4.4	12.5		10		90				<0.2		1.4	
						7.4	0.5	216	26.2		7.9		27.6		64.0		4.4		12.6		9		90				<0.2		1.4	
C2	Cloudy	Moderate	14:25	11.5	Surface	1.0	1.4	157	28.2	28.2	7.7	7.7	11.8	11.8	84.3	84.3	6.2	5.9	8.1	11.3	8	8	86	88	825669	806939	<0.2	<0.2	1.6	1.7
						1.0	1.4	167	28.2		7.7		11.8		84.2		6.2		8.3		7		86				<0.2		1.7	
					Middle	5.8	1.3	151	28.1	28.1	7.7	7.7	15.8	15.8	78.0	78.0	5.6		12.3		8		87				<0.2		1.6	
						5.8	1.4	151	28.1		7.7		15.8		77.9		5.6		12.6		7		88				<0.2		1.7	
					Bottom	10.5	0.8	147	27.5	27.5	7.7	7.7	22.0	22.0	70.5	70.6	4.9	4.9	13.1		9		90				<0.2		1.6	
						10.5	0.8	153	27.5		7.7		22.0		70.7		4.9		13.6		8		90				<0.2		1.7	
C3	Cloudy	Moderate	12:16	11.7	Surface	1.0	0.5	94	27.6	27.6	7.8	7.8	20.4	20.4	77.8	77.8	5.5	5.2	4.9	8.9	8	9	86	88	822094	817794	<0.2	<0.2	1.5	1.4
						1.0	0.5	97	27.6		7.8		20.4		77.8		5.5		5.0		9		85				<0.2		1.4	
					Middle	5.9	0.3	37	27.0	27.0	7.8	7.8	23.9	23.9	70.6	70.5	4.9		9.0		8		87				<0.2		1.4	
						5.9	0.3	38	26.9		7.8		23.9		70.4		4.9		9.8		9		88				<0.2		1.5	
					Bottom	10.7	0.3	29	26.7	26.7	7.8	7.8	26.7	26.7	70.3	70.4	4.9	4.9	12.6		8		90				<0.2		1.4	
						10.7	0.4	29	26.7		7.8		26.7		70.5		4.9		11.9		9		89				<0.2		1.4	
IM1	Cloudy	Moderate	14:00	4.5	Surface	1.0	0.0	8	28.2	28.2	8.0	8.0	17.3	17.3	85.6	85.4	6.1	6.1	5.7	7.0	6	7	86	87	817930	807128	<0.2	<0.2	1.5	1.5
						1.0	0.0	8	28.2		8.0		17.3		85.2		6.0		5.7		7		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.1	1	26.3	26.4	7.9	7.9	27.7	27.7	66.4	66.5	4.6	4.6	8.2		8		88				<0.2		1.4	
						3.5	0.1	1	26.4		7.9		27.6		66.6		4.6		8.5		7		89				<0.2		1.5	
IM2	Cloudy	Moderate	14:08	6.4	Surface	1.0	0.2	0	28.0	28.0	8.0	8.0	18.9	18.9	84.0	84.0	5.9	5.6	6.1	7.6	8	7	85	87	818177	806181	<0.2	<0.2	1.4	1.4
						1.0	0.2	0	28.0		8.0		18.9		83.9		5.9		6.1		7		85				<0.2		1.4	
					Middle	3.2	0.0	208	27.4	27.4	8.0	8.0	21.2	21.2	73.8	73.8	5.2		7.7		8		86				<0.2		1.3	
						3.2	0.0	227	27.4		8.0		21.2		73.7		5.2		7.7		7		87				<0.2		1.4	
					Bottom	5.4	0.1	354	26.2	26.2	7.9	7.9	28.1	28.1	62.4	62.5	4.3	4.3	9.0		7		89				<0.2		1.4	
						5.4	0.1	326	26.2		7.9		28.1		62.6		4.3		9.1		6		90				<0.2		1.4	
IM3	Cloudy	Moderate	14:14	6.6	Surface	1.0	0.1	213	28.2	28.2	8.0	8.0	17.1	17.1	91.0	90.9	6.5	6.0	5.6	7.4	6	7	85	87	818763	805600	<0.2	<0.2	1.4	1.4
						1.0	0.1	226	28.2		8.0		17.1		90.7		6.4		5.6		6		86				<0.2		1.3	
					Middle	3.3	0.3	242	27.7	27.7	8.0	8.0	19.9	19.9	78.5	78.3	5.5		6.9		8		86				<0.2		1.3	
						3.3	0.3	247	27.7		8.0		20.0		78.1		5.5		7.0		7		87				<0.2		1.4	
					Bottom	5.6	0.3	255	26.3	26.3	7.9	7.9	27.8	27.7	63.4	63.5	4.4	4.4	9.8		8		89				<0.2		1.3	
						5.6	0.3	256	26.3		7.9		27.7		63.6		4.4		9.7		7		89				<0.2		1.4	
IM4	Cloudy	Rough	14:30	7.3	Surface	1.0	1.3	198	28.0	28.0	7.9	7.9	17.7	17.7	82.8	82.8	5.9	5.9	14.7	17.2	14	13	85	88	819702	804603	<0.2	<0.2	1.5	1.5
						1.0	1.3	208	28.0		7.9		17.7		82.8		5.9		14.4		15		85				<0.2		1.5	
					Middle	3.7	1.2	201	28.0	28.0	7.9	7.9	17.7	17.7	82.9	82.9	5.9		17.1		14		87				<0.2		1.5	
						3.7	1.2	217	28.0		7.9		17.7		82.9		5.9		17.0		13		88				<0.2		1.6	
					Bottom	6.3	1.1	186	28.0	28.0	7.8	7.8	17.7	17.7	83.5	83.6	5.9	5.9	20.2		11		90				<0.2		1.5	
						6.3	1.2	198	28.0		7.8		17.7		83.6		5.9		19.9		12		90				<0.2		1.5	
IM5	Cloudy	Moderate	14:43	6.9	Surface	1.0	1.4	224	28.0	28.0	7.9	7.9	17.7	17.7	81.2	81.2	5.8	5.7	14.4	17.8	14	18	85	87	820758	804872	<0.2	<0.2	1.5	1.6
						1.0	1.4	232	28.0		7.9		17.7		81.2		5.8		14.4		14		85				<0.2		1.5	
					Middle	3.5	1.2	223	27.9	27.9	7.9	7.9	18.5	18.5	79.2	79.2	5.6		17.9		13		86				<0.2		1.6	
						3.5	1.2	243	27.9		7.9		18.6		79.2		5.6		18.3		22		86				<0.2		1.6	
					Bottom	5.9	1.1	217	27.9	27.9	7.8	7.8	18.7	18.7	80.1	80.3	5.7	5.7	20.7		23		89				<0.2		1.5	
						5.9	1.2	232	27.9		7.8		18.7		80.4		5.7		21.2		22		89				<0.2		1.6	
IM6	Cloudy	Moderate	14:56	6.6	Surface	1.0	1.4	247	28.1	28.1	7.9	7.9	16.5	16.5	84.3	84.3	6.0	6.0	15.9	18.4	20	21	84	87	821081	805808	<0.2	<0.2	1.5	1.5
						1.0	1.4	251	28.1		7.9		16.5		84.3		6.0		15.9		22		85				<0.2		1.5	
					Middle	3.3	1.2	249	28.1	28.1	7.9	7.9	16.6	16.6	83.8	83.8	6.0		18.5		20		87				<0.2		1.6	
						3.3	1.3	268	28.1		7.9		16.7		83.8		6.0		18.2		21		87				<0.2		1.4	
					Bottom	5.6	1.1	247	28.1	28.1	7.8	7.8	16.8	16.8	83.9	84.0	6.0	6.0	20.8		21		89				<0.2		1.5	
						5.6	1.1	268	28.1		7.8		16.8		84.0		6.0		20.9		21		90				<0.2		1.6	
IM7	Cloudy	Moderate	15:04	7.6	Surface	1.0	1.2	236	28.2	28.2	7.9	7.9	13.9	13.9	84.7	84.7	6.1	6.0	7.7	10.5	9	10	84	87	821335	806855	<0.2	<0.2	1.5	1.7
						1.0	1.2	250	28.2		7.9		13.9		84.6		6.1		7.7		9		85				<0.2		1.6	
					Middle	3.8	1.1	244	28.1	28.1	7.8	7.8	16.2	16.2	81.4	81.5	5.8		10.5		9		87				<0.2		1.7	
						3.8	1.1	256	28.1		7.8		16.2		81.5		5.8		10.4		10		87				<0.2		1.7	
					Bottom	6.6	0.9	252	28.1	28.1	7.8	7.8	16.7	16.7	81.8	81.9	5.8	5.8	13.4		10		90				<0.2		1.8	
						6.6	0.9	261	28.1		7.8		16.7		82.0		5.8		13.3		12		90				<0.2		1.7	
IM8	Cloudy	Moderate	13:55	7.5	Surface	1.0	0.5	234	28.0	28.0	7.8	7.8	15.3	15.3	86.6	86.2	6.2	6.0	10.0	13.2	8	8	85	88	821846	808147	<0.2	<0.2	1.6	1.6
						1.0	0.5	244	28.0		7.8		15.3		85.8		6.2		10.7		9		86				<0.2		1.6	
					Middle	3.8	0.5	230	28.0	28.0	7.8	7.8	17.9	17.9	81.4	81.5	5.8		13.1		8		88				<0.2		1.7	
						3.8	0.5	241	28.0		7.8		17.9		81.6		5.8		13.2		8		87				<0.2		1.6	
					Bottom	6.5	0.3	274	28.0	28.0	7.8	7.8	18.1	18.1	82.5	82.6	5.8	5.9	15.9		7		90				<0.2		1.6	
						6.5	0.3	277	27.9		7.8		18.1		82.7		5.9		16.0		8		90				<0.2		1.6	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	13:49	7.0	Surface	1.0	0.4	127	28.1	28.1	7.8	7.8	15.1	15.1	85.7	85.6	6.2	6.1	8.1	10.0	8	8	85	88	822106	808789	<0.2	<0.2	1.6	1.6
						1.0	0.4	129	28.1		7.8		15.1		85.5		6.2		8.2		8		86				<0.2		1.7	
					Middle	3.5	0.4	129	28.0	28.0	7.8	7.8	15.3	15.3	81.6	81.6	5.9		9.2		9		87				<0.2		1.6	
						3.5	0.5	136	28.0		7.8		15.4		81.5		5.9		9.5		8		88				<0.2		1.6	
					Bottom	6.0	0.2	97	28.1	28.1	7.8	7.8	18.1	18.1	81.6	81.7	5.8	5.8	12.3		8		90				<0.2		1.6	
						6.0	0.2	101	28.0		7.8		18.1		81.7		5.8		12.7		8		89				<0.2		1.7	
IM10	Cloudy	Moderate	13:40	7.2	Surface	1.0	0.7	140	28.2	28.2	7.8	7.8	14.8	14.8	86.6	86.6	6.2	6.0	5.9	10.1	8	8	86	88	822404	809801	<0.2	<0.2	1.6	1.6
						1.0	0.7	145	28.2		7.8		14.8		86.5		6.2		6.3		8		85				<0.2		1.6	
					Middle	3.6	0.7	135	28.1	28.1	7.8	7.8	17.5	17.5	80.8	80.9	5.7		11.3		9		89				<0.2		1.5	
						3.6	0.7	139	28.1		7.8		17.6		80.9		5.7		11.6		9		88				<0.2		1.6	
					Bottom	6.2	0.6	127	28.1	28.1	7.8	7.8	17.7	17.7	82.7	82.8	5.9	5.9	12.8		6		90				<0.2		1.6	
						6.2	0.7	139	28.1		7.8		17.7		82.9		5.9		12.9		6		90				<0.2		1.6	
IM11	Cloudy	Moderate	13:26	8.1	Surface	1.0	1.1	102	28.2	28.2	7.8	7.8	15.2	15.2	87.3	87.3	6.3	6.1	5.1	11.5	10	15	87	88	822061	811473	<0.2	<0.2	1.3	1.4
						1.0	1.1	111	28.2		7.8		15.2		87.3		6.3		5.4		11		85				<0.2		1.3	
					Middle	4.1	0.9	98	28.1	28.1	7.8	7.8	17.1	17.1	81.5	81.6	5.8		12.5		18		88				<0.2		1.3	
						4.1	0.9	107	28.1		7.8		17.1		81.7		5.8		12.3		16		87				<0.2		1.4	
					Bottom	7.1	0.7	93	28.0	28.0	7.8	7.8	17.2	17.2	84.8	84.9	6.0	6.1	16.7		17		90				<0.2		1.6	
						7.1	0.8	102	28.0		7.8		17.2		85.0		6.1		16.9		18		90				<0.2		1.6	
IM12	Cloudy	Moderate	13:15	8.6	Surface	1.0	0.5	120	28.0	28.0	7.8	7.8	17.3	17.3	81.7	81.7	5.8	5.8	7.6	8.1	15	13	86	88	821468	812046	<0.2	<0.2	1.4	1.4
						1.0	0.5	124	28.0		7.8		17.4		81.6		5.8		7.7		14		85				<0.2		1.3	
					Middle	4.3	0.4	108	28.0	28.0	7.8	7.8	17.7	17.8	81.3	81.3	5.8		7.8		12		88				<0.2		1.3	
						4.3	0.4	116	28.0		7.8		17.8		81.3		5.8		7.9		13		87				<0.2		1.4	
					Bottom	7.6	0.3	102	28.0	28.0	7.8	7.8	18.0	18.0	83.1	83.3	5.9	5.9	8.8		10		90				<0.2		1.4	
						7.6	0.3	111	27.9		7.8		18.0		83.4		5.9		8.9		11		90				<0.2		1.4	
SR1A	Cloudy	Moderate	12:57	5.3	Surface	1.0	-	-	28.1	28.1	7.8	7.8	17.9	17.9	82.9	83.0	5.9	5.9	7.9	7.7	5	5	-	-	819982	812662	-	-	-	-
						1.0	-	-	28.1		7.8		17.9		83.0		5.9		7.9		5		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	27.9	27.9	7.8	7.8	18.0	18.0	85.6	85.8	6.1	6.1	7.6		5		-				-		-	
						4.3	-	-	27.9		7.8		18.0		85.9		6.1		7.6		4		-				-		-	
SR2	Cloudy	Moderate	12:43	4.0	Surface	1.0	0.6	76	28.1	28.1	7.8	7.8	16.3	16.3	87.3	85.8	6.2	6.1	7.5	9.9	5	5	86	88	821479	814151	<0.2	<0.2	1.5	1.4
						1.0	0.6	81	28.1		7.8		16.3		84.2		6.0		8.0		5		86				<0.2		1.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.3	76	28.0	28.0	7.8	7.8	18.5	18.5	84.4	84.6	6.0	6.0	11.8		6		88				<0.2		1.4	
						3.0	0.3	77	28.0		7.8		18.5		84.8		6.0		12.1		5		90				<0.2		1.3	
SR3	Cloudy	Moderate	14:00	8.9	Surface	1.0	0.6	191	28.2	28.2	7.8	7.8	15.1	15.1	86.1	86.0	6.2	6.0	7.0	10.2	8	8	-	-	822158	807589	-	-	-	-
						1.0	0.6	193	28.2		7.8		15.1		85.9		6.2		7.5		9		-				-		-	
					Middle	4.5	0.6	188	28.0	28.0	7.8	7.8	18.4	18.4	80.0	80.2	5.7		10.8		8		-				-		-	
						4.5	0.6	199	28.0		7.8		18.4		80.3		5.7		10.9		8		-				-		-	
					Bottom	7.9	0.3	209	28.0	28.0	7.8	7.8	18.5	18.5	81.6	81.8	5.8	5.8	12.6		6		-				-		-	
						7.9	0.4	214	27.9		7.8		18.6		81.9		5.8		12.3		7		-				-		-	
SR4A	Cloudy	Calm	13:18	9.2	Surface	1.0	0.7	253	28.1	28.1	8.0	8.0	14.9	14.9	85.2	85.0	6.1	5.4	7.0	10.4	8	8	-	-	817181	807787	-	-	-	-
						1.0	0.7	275	28.1		8.0		14.9		84.8		6.1		7.4		8		-				-		-	
					Middle	4.6	0.3	262	26.7	26.7	7.9	7.9	25.7	25.6	66.4	66.5	4.6		10.9		9		-				-		-	
						4.6	0.3	287	26.7		7.9		25.5		66.6		4.6		10.9		8		-				-		-	
					Bottom	8.2	0.3	243	26.3	26.3	7.8	7.8	27.5	27.5	65.3	65.4	4.5	4.5	13.0		9		-				-		-	
						8.2	0.3	254	26.3		7.8		27.5		65.4		4.5		13.2		9		-				-		-	
SR5A	Cloudy	Calm	13:03	3.5	Surface	1.0	0.1	321	28.2	28.2	7.9	7.8	16.4	16.4	87.1	87.0	6.2	6.2	7.7	9.0	17	15	-	-	816571	810707	-	-	-	-
						1.0	0.1	322	28.2		7.8		16.5		86.9		6.2		8.0		17		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	316	28.2	28.2	7.8	7.8	16.9	16.8	86.2	86.3	6.1	6.1	10.1		15		-				-		-	
						2.5	0.1	339	28.2		7.8		16.8		86.3		6.1		10.0		12		-				-		-	
SR6A	Cloudy	Calm	12:23	4.3	Surface	1.0	0.1	357	28.0	28.0	8.0	8.0	18.5	18.5	77.2	77.0	5.5	5.5	14.2	13.1	19	19	-	-	817967	814757	-	-	-	-
						1.0	0.1	328	28.0		8.0		18.5		76.8		5.4		14.1		19		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	224	27.8	27.8	7.9	7.9	21.1	21.1	74.8	74.9	5.2	5.2	12.1		19		-				-		-	
						3.3	0.1	228	27.8		7.9		21.1		74.9		5.2		12.0		18		-				-		-	
SR7	Cloudy	Moderate	11:36	16.5	Surface	1.0	0.9	83	27.0	27.0	7.8	7.8	23.3	23.3	75.6	75.6	5.3	5.1	3.4	3.9	5	5	-	-	823645	823733	-	-	-	-
						1.0	1.0	85	27.0		7.8		23.3		75.6		5.3		3.4		5		-				-		-	
					Middle	8.3	0.5	90	26.6	26.6	7.8	7.8	26.3	26.3	69.8	69.8	4.8		4.0		5		-				-		-	
						8.3	0.5	98	26.6		7.8		26.3		69.8		4.8		4.0		5		-				-		-	
					Bottom	15.5	0.0	160	26.0	26.0	7.7	7.7	29.2	29.1	66.1	66.1	4.6	4.6	4.2		4		-				-		-	
						15.5	0.0	167	26.0		7.7		29.1		66.0		4.5		4.1		5		-				-		-	
SR8	Cloudy	Moderate	13:07	5.4	Surface	1.0	-	-	28.5	28.5	7.8	7.8	17.9	18.0	84.2	84.2	5.9	5.9	8.2	9.8	9	9	-	-	820423	811662	-	-	-	-
						1.0	-	-	28.5		7.8		18.0		84.2		5.9		8.3		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.1	28.1	7.8	7.8	18.7	18.7	83.5	85.4	5.9	6.0	11.2		10		-				-		-	
						4.4	-	-	28.1		7.8		18.7		87.2		6.1		11.5		10		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	20:02	7.7	Surface	1.0	0.3	28	28.0	28.0	7.9	7.9	15.7	15.7	82.4	82.3	5.9	5.8	14.3	15.7	17	18	85	88	815601	804253	<0.2	<0.2	1.4	1.4
						1.0	0.3	29	28.0		7.9		15.7		82.2		5.9		14.2		18		86				<0.2		1.5	
					Middle	3.9	0.4	33	27.9	27.9	7.9	7.9	17.8	17.8	79.6	79.6	5.7		16.2		18		88				<0.2		1.4	
						3.9	0.4	34	27.9		7.9		17.8		79.5		5.7		16.2		18		88				<0.2		1.5	
					Bottom	6.7	0.5	36	27.6	27.6	7.8	7.8	20.4	20.4	76.8	76.8	5.4	5.4	16.6		18		90				<0.2		1.4	
						6.7	0.5	36	27.6		7.8		20.4		76.8		5.4		16.9		19		90				<0.2		1.4	
C2	Cloudy	Moderate	18:47	11.6	Surface	1.0	0.5	210	28.2	28.2	7.7	7.7	9.5	9.5	75.9	75.8	5.6	5.4	15.0	13.3	9	8	86	88	825670	806939	<0.2	<0.2	1.9	2.0
						1.0	0.6	211	28.1		7.7		9.5		75.6		5.6		15.7		8		86				<0.2		1.9	
					Middle	5.8	0.4	202	28.0	28.0	7.7	7.7	14.6	14.6	70.3	70.3	5.1		11.0		8		88				<0.2		2.0	
						5.8	0.4	203	28.0		7.7		14.7		70.2		5.1		11.2		8		87				<0.2		2.2	
					Bottom	10.6	0.1	84	27.9	27.9	7.7	7.7	16.4	16.4	70.3	70.4	5.0	5.0	13.2		7		90				<0.2		2.0	
						10.6	0.1	87	27.9		7.7		16.4		70.5		5.0		13.4		8		90				<0.2		2.2	
C3	Cloudy	Moderate	20:36	12.0	Surface	1.0	0.5	218	27.9	27.9	7.7	7.7	17.4	17.5	78.9	78.9	5.6	5.3	5.1	7.9	9	8	86	88	822121	817805	<0.2	<0.2	2.1	2.1
						1.0	0.5	227	27.8		7.8		17.5		78.8		5.6		5.2		10		86				<0.2		2.1	
					Middle	6.0	0.5	229	27.3	27.3	7.7	7.7	22.7	22.7	71.2	71.1	5.1		6.4		6		88				<0.2		2.1	
						6.0	0.6	244	27.2		7.7		22.7		71.0		5.0		6.6		7		87				<0.2		2.1	
					Bottom	11.0	0.4	258	27.1	27.2	7.7	7.7	24.7	24.6	72.7	72.9	5.0	5.1	11.9		8		90				<0.2		2.2	
						11.0	0.4	279	27.2		7.7		24.6		73.0		5.1		12.0		8		90				<0.2		2.2	
IM1	Rainy	Moderate	19:36	4.4	Surface	1.0	0.4	358	28.0	28.0	8.0	8.0	18.1	18.0	84.6	84.7	6.0	6.0	13.7	14.8	18	17	86	87	817946	807120	<0.2	<0.2	1.6	1.6
						1.0	0.4	329	28.0		8.0		18.0		84.7		6.0		13.6		19		86				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.3	351	27.8	27.8	7.9	7.9	19.0	19.0	83.3	83.4	5.9	5.9	15.7		16		88				<0.2		1.5	
						3.4	0.3	323	27.8		7.9		19.0		83.5		5.9		16.1		16		88				<0.2		1.7	
IM2	Rainy	Moderate	19:28	6.2	Surface	1.0	0.5	5	27.8	27.8	8.0	8.0	17.5	17.5	82.1	82.1	5.9	5.8	9.2	11.8	7	7	85	87	818184	806163	<0.2	<0.2	1.8	1.6
						1.0	0.5	5	27.8		8.0		17.5		82.1		5.9		9.3		7		85				<0.2		1.4	
					Middle	3.1	0.5	345	27.6	27.6	8.0	8.0	20.2	20.2	79.1	79.1	5.6		12.0		6		86				<0.2		1.6	
						3.1	0.5	345	27.6		8.0		20.2		79.1		5.6		11.6		7		86				<0.2		1.5	
					Bottom	5.2	0.4	336	27.6	27.6	7.9	7.9	20.4	20.4	79.2	79.3	5.6	5.6	14.3		8		89				<0.2		1.7	
						5.2	0.4	351	27.6		7.9		20.4		79.3		5.6		14.3		6		89				<0.2		1.8	
IM3	Rainy	Moderate	19:20	6.4	Surface	1.0	0.5	320	27.7	27.7	8.0	8.0	19.3	19.3	84.5	84.5	6.0	5.8	8.9	11.9	10	9	85	87	818772	805590	<0.2	<0.2	2.1	1.8
						1.0	0.5	327	27.7		8.0		19.3		84.5		6.0		9.1		9		85				<0.2		1.8	
					Middle	3.2	0.6	327	27.6	27.6	7.9	7.9	20.7	20.7	78.4	78.4	5.5		12.2		8		87				<0.2		1.7	
						3.2	0.6	344	27.5		7.9		20.8		78.3		5.5		11.9		9		87				<0.2		1.7	
					Bottom	5.4	0.5	325	26.6	26.6	7.8	7.8	26.0	26.0	65.9	66.2	4.6	4.6	14.5		8		89				<0.2		1.8	
						5.4	0.5	347	26.6		7.8		26.0		66.4		4.6		14.7		9		90				<0.2		1.9	
IM4	Rainy	Moderate	19:08	7.1	Surface	1.0	0.6	342	27.8	27.8	8.0	8.0	18.3	18.3	82.3	82.3	5.8	5.6	9.0	10.8	12	11	84	87	819729	804621	<0.2	<0.2	2.3	2.2
						1.0	0.6	315	27.8		8.0		18.3		82.3		5.8		9.3		10		85				<0.2		2.3	
					Middle	3.6	0.7	340	27.7	27.7	8.0	8.0	20.1	20.1	76.9	77.0	5.4		10.0		11		86				<0.2		2.1	
						3.6	0.7	313	27.7		8.0		20.0		77.0		5.4		10.2		11		86				<0.2		2.0	
					Bottom	6.1	0.6	330	26.8	26.8	8.0	8.0	25.1	25.1	65.9	65.9	4.6	4.6	13.3		10		89				<0.2		2.1	
						6.1	0.6	334	26.8		8.0		25.1		65.9		4.6		13.4		10		89				<0.2		2.3	
IM5	Rainy	Moderate	18:59	6.5	Surface	1.0	0.4	309	28.1	28.1	8.0	8.0	12.6	12.6	83.0	83.2	6.1	6.1	13.5	13.4	15	15	85	87	820728	804881	<0.2	<0.2	2.1	2.1
						1.0	0.4	337	28.1		8.0		12.6		83.3		6.1		13.3		14		85				<0.2		2.2	
					Middle	3.3	0.5	336	27.9	27.9	8.0	8.0	16.3	16.3	83.9	83.9	6.0		11.8		15		86				<0.2		2.1	
						3.3	0.5	309	27.9		8.0		16.3		83.8		6.0		11.8		14		87				<0.2		2.1	
					Bottom	5.5	0.4	349	27.2	27.2	7.9	7.9	22.1	22.1	75.4	75.5	5.3	5.3	15.0		16		89				<0.2		2.1	
						5.5	0.4	321	27.2		7.9		22.1		75.6		5.3		14.9		17		89				<0.2		2.2	
IM6	Rainy	Moderate	18:53	6.2	Surface	1.0	0.5	266	28.2	28.2	7.8	7.8	11.0	11.0	80.7	80.8	5.9	5.9	14.1	15.7	10	12	84	86	821061	805811	<0.2	<0.2	2.1	2.1
						1.0	0.6	287	28.2		7.8		11.0		80.8		5.9		14.2		11		84				<0.2		2.1	
					Middle	3.1	0.4	276	28.2	28.2	7.7	7.7	11.1	11.1	81.0	81.0	5.9		15.7		12		86				<0.2		2.1	
						3.1	0.5	280	28.2		7.7		11.1		81.0		5.9		15.7		13		86				<0.2		2.2	
					Bottom	5.2	0.4	277	28.2	28.2	7.7	7.7	11.1	11.1	81.9	82.0	6.0	6.0	16.9		13		89				<0.2		2.0	
						5.2	0.5	277	28.2		7.7		11.1		82.1		6.0		17.3		14		89				<0.2		2.1	
IM7	Rainy	Moderate	18:47	7.3	Surface	1.0	0.7	245	28.2	28.2	7.9	7.9	10.5	10.5	80.3	80.3	5.9	5.9	13.4	15.5	12	12	85	87	821356	806842	<0.2	<0.2	2.3	2.1
						1.0	0.7	255	28.2		7.9		10.5		80.3		5.9		13.4		13		85				<0.2		2.1	
					Middle	3.7	0.6	255	28.2	28.2	7.8	7.8	10.8	10.8	80.5	80.5	5.9		15.3		12		87				<0.2		2.1	
						3.7	0.7	262	28.2		7.8		10.8		80.5		5.9		15.3		13		87				<0.2		2.0	
					Bottom	6.3	0.5	261	28.2	28.2	7.8	7.8	11.0	11.0	80.7	80.8	5.9	5.9	17.6		12		89				<0.2		2.0	
						6.3	0.5	262	28.2		7.8		11.0		80.8		5.9		17.7		11		89				<0.2		2.0	
IM8	Cloudy	Moderate	19:10	7.0	Surface	1.0	0.2	212	28.3	28.3	7.7	7.7	9.5	9.5	81.2	81.2	6.0	6.0	13.1	12.7	13	14	86	88	821808	808135	<0.2	<0.2	2.1	2.1
						1.0	0.2	228	28.3		7.7		9.5		81.2		6.0		13.2		15		85				<0.2		2.1	
					Middle	3.5	0.2	222	28.3	28.3	7.7	7.7	10.6	10.6	81.6	81.6	6.0		12.2		13		88				<0.2		2.0	
						3.5	0.2	238	28.3		7.7		10.6		81.6		6.0		12.3		14		87				<0.2		2.1	
					Bottom	6.0	0.2	250	28.1	28.1	7.7	7.7	10.7	10.7	82.6	82.7	6.1	6.1	12.9		14		90				<0.2		2.2	
						6.0	0.2	254	28.1		7.7		10.7		82.8		6.1		12.4		13		90				<0.2		2.0	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 06 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	19:16	7.0	Surface	1.0	0.2	220	28.4	28.4	7.7	7.7	8.9	8.9	83.3	83.3	6.2	6.2	9.3	10.4	10	10	85	88	822085	808814	<0.2	<0.2	2.1	2.1
						1.0	0.2	223	28.4		7.7		8.9		83.3		6.2		9.3		9		86				<0.2		2.0	
					Middle	3.5	0.2	264	28.4	28.4	7.7	7.7	9.2	9.2	83.8	84.0	6.2		9.5		10		88				<0.2		2.1	
						3.5	0.2	265	28.4		7.7		9.2		84.1		6.2		9.4		9		87				<0.2		2.1	
					Bottom	6.0	0.1	316	28.4	28.4	7.7	7.7	10.0	10.0	85.5	85.7	6.3	6.3	12.3		9		90				<0.2		2.0	
						6.0	0.1	323	28.4		7.7		10.0		85.9		6.3		12.7		10		90				<0.2		2.0	
IM10	Cloudy	Moderate	19:24	6.5	Surface	1.0	0.2	333	28.4	28.4	7.7	7.7	9.9	9.9	83.0	83.1	6.1	6.1	8.7	9.6	11	10	87	88	822383	809814	<0.2	<0.2	2.1	2.1
						1.0	0.3	333	28.4		7.7		9.9		83.1		6.1		8.7		10		85				<0.2		2.2	
					Middle	3.3	0.2	336	28.3	28.3	7.7	7.7	9.9	9.9	82.6	82.6	6.1		9.2		11		88				<0.2		2.1	
						3.3	0.2	354	28.3		7.7		9.9		82.6		6.1		9.3		10		87				<0.2		2.1	
					Bottom	5.5	0.2	327	28.3	28.3	7.7	7.7	11.0	11.0	82.6	82.6	6.1	6.1	10.9		10		90				<0.2		2.1	
						5.5	0.2	357	28.3		7.7		11.0		82.6		6.1		10.9		10		90				<0.2		2.1	
IM11	Cloudy	Moderate	19:36	6.8	Surface	1.0	0.5	314	28.3	28.3	7.7	7.7	12.3	12.3	84.0	84.0	6.1	6.1	8.7	10.9	11	10	86	88	822036	811480	<0.2	<0.2	2.2	2.1
						1.0	0.5	316	28.3		7.7		12.3		84.0		6.1		8.7		12		85				<0.2		2.1	
					Middle	3.4	0.5	303	28.2	28.2	7.7	7.7	14.8	14.8	84.3	84.3	6.1		11.8		8		87				<0.2		2.0	
						3.4	0.6	323	28.2		7.7		14.7		84.3		6.1		11.2		9		88				<0.2		2.0	
					Bottom	5.8	0.4	308	28.2	28.2	7.8	7.8	15.0	15.0	84.3	84.3	6.1	6.1	12.4		9		90				<0.2		2.2	
						5.8	0.4	320	28.2		7.8		15.0		84.3		6.1		12.7		9		90				<0.2		2.1	
IM12	Cloudy	Moderate	19:42	8.5	Surface	1.0	0.3	325	28.3	28.3	7.7	7.7	12.8	12.8	83.7	83.7	6.1	6.1	9.0	10.7	9	10	86	89	821471	812029	<0.2	<0.2	2.1	2.1
						1.0	0.3	332	28.3		7.7		12.8		83.7		6.1		9.1		10		88				<0.2		2.1	
					Middle	4.3	0.6	301	28.2	28.2	7.7	7.7	15.0	15.0	83.7	83.7	6.0		9.6		10		88				<0.2		2.1	
						4.3	0.6	308	28.2		7.7		15.0		83.7		6.0		9.6		10		89				<0.2		2.1	
					Bottom	7.5	0.4	306	28.1	28.1	7.7	7.7	18.4	18.4	83.1	83.2	5.9	5.9	13.6		9		90				<0.2		2.1	
						7.5	0.4	333	28.1		7.7		18.4		83.2		5.9		13.5		10		90				<0.2		2.1	
SR1A	Cloudy	Moderate	20:00	4.0	Surface	1.0	-	-	28.2	28.2	7.7	7.7	13.1	13.2	84.7	84.7	6.1	6.1	6.8	7.1	10	8	-	-	819970	812658	-	-	-	-
						1.0	-	-	28.2		7.7		13.3		84.7		6.1		6.8		10		-				-		-	
					Middle	2.0	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.0	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	-	-	28.1	28.1	7.7	7.7	15.6	15.6	86.8	86.9	6.2	6.2	7.3		7		-				-		-	
						3.0	-	-	28.1		7.7		15.6		87.0		6.2		7.3		6		-				-		-	
SR2	Cloudy	Moderate	20:12	3.3	Surface	1.0	0.3	1	28.1	28.1	7.7	7.7	14.1	14.1	83.8	83.8	6.1	6.1	8.5	10.7	6	6	86	87	821471	814180	<0.2	<0.2	2.1	2.2
						1.0	0.3	1	28.1		7.7		14.2		83.8		6.1		8.6		7		85				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.3	5	28.1	28.1	7.7	7.7	16.4	16.5	85.2	85.5	6.1	6.1	12.7		6		89				<0.2		2.1	
						2.3	0.3	5	28.1		7.7		16.6		85.7		6.1		12.9		6		89				<0.2		2.2	
SR3	Cloudy	Moderate	19:03	8.0	Surface	1.0	0.5	226	28.3	28.3	7.7	7.7	10.9	10.9	77.1	77.1	5.7	5.7	12.7	11.5	11	12	-	-	822158	807567	-	-	-	-
						1.0	0.5	240	28.3		7.7		10.9		77.1		5.7		12.8		12		-				-		-	
					Middle	4.0	0.4	245	28.2	28.2	7.7	7.7	11.6	11.6	77.5	77.5	5.7		10.1		12		-				-		-	
						4.0	0.4	250	28.2		7.7		11.6		77.5		5.7		10.2		11		-				-		-	
					Bottom	7.0	0.4	267	28.2	28.2	7.7	7.7	11.7	11.7	77.8	77.9	5.7	5.7	11.9		11		-				-		-	
						7.0	0.4	288	28.2		7.7		11.7		77.9		5.7		11.1		12		-				-		-	
SR4A	Rainy	Calm	20:22	8.5	Surface	1.0	0.4	64	28.0	28.0	8.0	8.0	16.1	16.1	83.8	83.9	6.0	6.0	15.5	15.6	20	19	-	-	817198	807830	-	-	-	-
						1.0	0.4	69	28.0		8.0		16.1		83.9		6.0		15.4		19		-				-		-	
					Middle	4.3	0.2	88	28.1	28.1	8.0	8.0	17.7	17.7	84.5	84.5	6.0		14.3		19		-				-		-	
						4.3	0.2	94	28.1		8.0		17.7		84.5		6.0		14.3		18		-				-		-	
					Bottom	7.5	0.1	78	28.1	28.1	7.9	7.9	17.8	17.8	84.3	84.3	6.0	6.0	17.1		19		-				-		-	
						7.5	0.1	84	28.1		7.9		17.8		84.3		6.0		17.0		17		-				-		-	
SR5A	Rainy	Calm	20:39	3.2	Surface	1.0	0.1	118	28.1	28.1	7.9	7.9	17.9	17.9	86.0	86.0	6.1	6.1	10.5	12.2	16	14	-	-	816596	810716	-	-	-	-
						1.0	0.2	127	28.1		7.9		17.9		86.0		6.1		10.6		15		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.2	0.1	116	28.1	28.1	7.9	7.8	17.9	17.9	86.0	86.1	6.1	6.1	13.5		13		-				-		-	
						2.2	0.2	126	28.1		7.8		17.9		86.1		6.1		14.1		12		-				-		-	
SR6A	Rainy	Calm	21:09	4.0	Surface	1.0	0.1	225	28.0	28.0	7.8	7.8	15.0	15.0	85.5	85.5	6.2	6.2	6.4	6.7	7	7	-	-	817944	814756	-	-	-	-
						1.0	0.1	237	28.0		7.8		15.0		85.5		6.2		6.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	154	28.0	28.0	7.7	7.7	16.2	16.2	85.4	85.5	6.1	6.1	7.0		6		-				-		-	
						3.0	0.0	156	28.0		7.7		16.2		85.5		6.1		7.0		7		-				-		-	
SR7	Cloudy	Moderate	21:09	16.0	Surface	1.0	0.1	180	27.2	27.2	7.8	7.8	22.7	22.7	71.9	71.9	5.1	5.0	5.7	7.6	7	7	-	-	823629	823743	-	-	-	-
						1.0	0.1	184	27.2		7.8		22.7		71.8		5.1		5.8		8		-				-		-	
					Middle	8.0	0.1	182	26.5	26.5	7.8	7.8	25.2	25.2	66.6	66.6	4.8		8.4		7		-				-		-	
						8.0	0.1	185	26.4		7.8		25.2		66.5		4.8		8.5		8		-				-		-	
					Bottom	15.0	0.1	10	26.2	26.2	7.8	7.8	28.1	28.1	68.4	68.5	4.7	4.7	8.7		7		-				-		-	
						15.0	0.1	10	26.2		7.8		28.1		68.6		4.7		8.5		7		-				-		-	
SR8	Cloudy	Moderate	19:51	4.5	Surface	1.0	-	-	28.4	28.4	7.7	7.7	12.5	12.6	86.2	86.2	6.3	6.3	9.0	11.6	9	9	-	-	820411	811635	-	-	-	-
						1.0	-	-	28.4		7.7		12.6		86.2		6.3		9.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	28.2	28.2	7.7	7.7	14.6	14.7	88.5	88.8	6.4	6.4	14.0		8		-				-		-	
						3.5	-	-	28.2		7.7		14.8		89.1		6.4		14.5		8		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	14:48	9.1	Surface	1.0	0.7	176	27.6	27.6	7.7	7.7	14.2	14.2	76.4	76.1	5.6	5.1	5.7	7.2	8	7	82	87	815620	804243	<0.2	<0.2	1.5	1.6
						1.0	0.7	181	27.5		7.7		14.2		75.8		5.5		5.9		7		83				<0.2		1.5	
					Middle	4.6	0.7	182	27.0	27.0	7.7	7.7	18.8	18.8	64.1	63.9	4.6		6.8		8		87				<0.2		1.5	
						4.6	0.7	183	26.9		7.7		18.9		63.7		4.6		6.8		7		87				<0.2		1.7	
					Bottom	8.1	0.7	208	25.6	25.6	7.7	7.7	28.6	28.6	52.4	52.5	3.7	3.7	8.9		7		91				<0.2		1.7	
						8.1	0.8	216	25.6		7.7		28.6		52.6		3.7		8.8		6		92				<0.2		1.8	
C2	Fine	Moderate	13:51	13.0	Surface	1.0	0.7	181	28.1	28.1	8.2	8.2	10.8	10.5	75.7	75.6	5.6	5.2	4.3	5.5	5	5	84	86	825702	806943	<0.2	<0.2	2.1	2.1
						1.0	0.8	186	28.1		8.2		10.3		75.5		5.6		4.3		5		83				<0.2		2.1	
					Middle	6.5	0.8	183	27.5	27.5	8.1	8.1	18.4	18.3	65.3	65.3	4.7		5.4		5		86				<0.2		2.1	
						6.5	0.8	188	27.5		8.1		18.3		65.2		4.7		5.5		5		86				<0.2		2.1	
					Bottom	12.0	0.7	163	26.6	26.6	8.1	8.1	24.3	24.3	63.6	63.7	4.5	4.5	6.8		3		89				<0.2		2.0	
						12.0	0.7	163	26.6		8.1		24.3		63.7		4.5		6.9		4		88				<0.2		2.1	
C3	Fine	Moderate	15:34	12.6	Surface	1.0	0.5	259	27.8	27.8	8.1	8.1	13.6	13.6	76.7	76.7	5.6	5.3	3.5	5.1	4	5	84	86	822116	817789	<0.2	<0.2	2.0	2.0
						1.0	0.5	282	27.8		8.1		13.6		76.7		5.6		3.5		5		84				<0.2		2.0	
					Middle	6.3	0.2	247	26.8	26.8	8.1	8.1	21.3	21.3	68.4	68.4	4.9		4.1		5		87				<0.2		2.1	
						6.3	0.2	252	26.9		8.1		21.3		68.4		4.9		4.1		5		87				<0.2		2.0	
					Bottom	11.6	0.3	74	25.7	25.7	8.1	8.1	28.6	28.6	59.9	59.9	4.2	4.2	7.5		5		88				<0.2		2.0	
						11.6	0.4	78	25.7		8.1		28.6		59.9		4.2		7.6		6		88				<0.2		2.1	
IM1	Cloudy	Moderate	14:27	5.4	Surface	1.0	0.1	7	27.1	27.1	7.7	7.7	19.5	19.6	65.6	65.3	4.7	4.7	8.6	9.5	7	6	82	83	817969	807151	<0.2	<0.2	1.8	1.8
						1.0	0.1	7	27.0		7.7		19.7		64.9		4.6		9.1		6		82				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	259	25.8	25.8	7.7	7.7	27.7	27.7	57.8	58.2	4.0	4.1	10.0		5		83				<0.2		1.7	
						4.4	0.1	263	25.8		7.7		27.7		58.6		4.1		10.1		5		84				<0.2		1.8	
IM2	Cloudy	Moderate	14:20	7.3	Surface	1.0	0.2	180	26.6	26.5	7.7	7.7	18.8	18.4	66.7	66.3	4.8	4.7	5.4	6.9	4	5	82	87	818149	806144	<0.2	<0.2	1.8	1.9
						1.0	0.2	191	26.4		7.7		18.0		65.9		4.8		5.3		4		83				<0.2		1.8	
					Middle	3.7	0.4	148	26.1	26.1	7.7	7.7	26.0	26.0	63.8	63.9	4.6		6.8		5		87				<0.2		2.0	
						3.7	0.4	155	26.1		7.7		26.1		63.9		4.6		6.7		5		87				<0.2		1.9	
					Bottom	6.3	0.1	98	25.7	25.7	7.7	7.7	28.5	28.5	53.2	53.7	3.7	3.8	8.6		7		90				<0.2		1.8	
						6.3	0.1	102	25.7		7.7		28.5		54.1		3.8		8.5		6		90				<0.2		1.8	
IM3	Cloudy	Moderate	14:15	7.7	Surface	1.0	0.1	186	28.1	28.1	7.7	7.7	11.9	11.9	80.8	80.2	5.9	4.9	5.0	6.3	5	5	79	86	818798	805612	<0.2	<0.2	1.8	1.8
						1.0	0.2	200	28.1		7.7		11.9		79.6		5.8		5.1		4		79				<0.2		1.8	
					Middle	3.9	0.4	155	26.1	26.1	7.7	7.7	23.6	23.7	56.6	56.6	4.0		6.2		5		87				<0.2		1.8	
						3.9	0.5	159	26.0		7.7		23.7		56.6		4.0		6.3		4		87				<0.2		1.8	
					Bottom	6.7	0.3	128	25.7	25.7	7.7	7.7	28.4	28.4	51.6	51.7	3.6	3.6	7.5		5		90				<0.2		1.7	
						6.7	0.3	140	25.7		7.7		28.4		51.8		3.6		7.7		5		91				<0.2		1.9	
IM4	Cloudy	Moderate	14:07	8.8	Surface	1.0	1.0	181	28.6	28.6	7.8	7.8	6.5	6.5	86.4	86.1	6.5	5.5	5.6	7.1	4	4	79	86	819717	804607	<0.2	<0.2	1.8	1.8
						1.0	1.1	190	28.6		7.8		6.5		85.7		6.4		5.5		4		82				<0.2		1.8	
					Middle	4.4	0.8	193	26.7	26.8	7.7	7.7	22.9	21.9	62.0	62.3	4.4		7.1		4		87				<0.2		1.8	
						4.4	0.9	208	26.8		7.7		20.9		62.5		4.5		7.2		5		87				<0.2		1.8	
					Bottom	7.8	0.5	171	26.2	26.2	7.7	7.7	24.7	24.7	57.7	57.8	4.1	4.1	8.7		4		90				<0.2		1.8	
						7.8	0.5	178	26.2		7.7		24.7		57.9		4.1		8.8		4		90				<0.2		1.9	
IM5	Cloudy	Moderate	14:01	8.4	Surface	1.0	0.8	200	28.7	28.7	7.7	7.7	6.6	6.6	87.0	86.9	6.5	5.8	4.6	5.5	4	5	82	86	820716	804854	<0.2	<0.2	1.9	1.9
						1.0	0.8	217	28.6		7.7		6.6		86.7		6.5		4.6		4		83				<0.2		1.9	
					Middle	4.2	0.7	214	27.4	27.4	7.6	7.6	16.4	16.3	71.2	71.3	5.1		5.2		5		86				<0.2		1.9	
						4.2	0.8	232	27.3		7.6		16.2		71.4		5.2		5.1		5		86				<0.2		1.9	
					Bottom	7.4	0.5	200	26.4	26.4	7.7	7.7	23.5	23.5	58.5	58.6	4.1	4.2	6.7		5		90				<0.2		1.9	
						7.4	0.5	214	26.4		7.7		23.5		58.7		4.2		6.8		5		90				<0.2		2.0	
IM6	Cloudy	Moderate	13:55	8.0	Surface	1.0	0.4	213	28.1	28.1	7.7	7.7	9.4	9.5	80.4	80.3	6.0	5.6	4.8	7.3	5	6	82	87	821083	805816	<0.2	<0.2	2.0	2.0
						1.0	0.4	229	28.0		7.7		9.5		80.1		6.0		4.9		5		83				<0.2		1.9	
					Middle	4.0	0.4	242	27.2	27.2	7.7	7.7	13.9	14.0	69.9	69.7	5.1		7.8		5		87				<0.2		1.9	
						4.0	0.4	253	27.1		7.7		14.1		69.5		5.1		7.9		5		88				<0.2		1.9	
					Bottom	7.0	0.2	215	26.6	26.6	7.7	7.7	22.1	22.0	61.1	61.2	4.3	4.3	9.2		6		91				<0.2		2.0	
						7.0	0.3	229	26.6		7.7		22.0		61.2		4.3		9.6		7		92				<0.2		2.0	
IM7	Cloudy	Moderate	13:48	9.6	Surface	1.0	0.2	227	27.7	27.7	7.6	7.6	11.0	11.0	73.4	73.3	5.4	5.2	5.8	7.2	7	7	82	87	821336	806856	<0.2	<0.2	1.9	1.9
						1.0	0.2	234	27.6		7.6		11.0		73.1		5.4		6.2		7		83				<0.2		1.9	
					Middle	4.8	0.2	251	27.2	27.2	7.7	7.7	15.3	15.3	67.6	67.5	4.9		7.3		7		86				<0.2		1.9	
						4.8	0.2	253	27.1		7.7		15.3		67.4		4.9		7.4		7		87				<0.2		1.8	
					Bottom	8.6	0.2	66	26.6	26.6	7.6	7.6	22.0	22.0	60.3	60.4	4.3	4.3	8.2		6		91				<0.2		1.9	
						8.6	0.2	72	26.6		7.6		22.0		60.5		4.3		8.1		6		91				<0.2		1.9	
IM8	Fine	Moderate	14:14	8.6	Surface	1.0	0.2	195	27.9	27.9	8.2	8.2	11.8	11.8	75.5	75.5	5.5	5.4	5.6	8.0	6	6	83	85	821848	808152	<0.2	<0.2	2.1	2.1
						1.0	0.2	203	27.9		8.2		11.8		75.5		5.5		5.7		7		82				<0.2		2.1	
					Middle	4.3	0.2	160	27.4	27.4	8.1	8.1	16.5	16.5	72.1	72.2	5.2		8.4		6		85				<0.2		2.1	
						4.3	0.2	170	27.4		8.1		16.5		72.2		5.2		8.5		6		85				<0.2		2.0	
					Bottom	7.6	0.1	54	27.1	27.1	8.1	8.1	18.8	18.8	72.8	73.0	5.2	5.2	10.0		5		87				<0.2		2.1	
						7.6	0.1	56	27.1		8.1		18.8		73.2		5.2		9.9		5		88				<0.2		2.1	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	14:22	8.2	Surface	1.0	0.2	107	28.2	28.2	8.1	8.1	9.9	9.9	79.7	79.7	5.9	5.6	3.9	6.1	6	6	83	86	822104	808821	<0.2	<0.2	2.2	2.3
						1.0	0.3	116	28.2		8.1		9.9		79.7		5.9		3.9		6		83				<0.2		2.1	
					Middle	4.1	0.5	123	27.3	27.3	8.1	8.1	17.1	17.1	74.2	74.3	5.3		6.4		6		85				<0.2		2.3	
						4.1	0.5	134	27.3		8.1		17.1		74.3		5.4		6.4		6		86				<0.2		2.4	
					Bottom	7.2	0.3	104	27.2	27.2	8.1	8.1	18.9	18.9	71.8	71.9	5.1	5.1	8.1		6		88				<0.2		2.3	
						7.2	0.3	110	27.2		8.1		18.9		72.0		5.1		7.8		6		88				<0.2		2.3	
IM10	Cloudy	Moderate	14:29	7.8	Surface	1.0	0.8	97	28.6	28.6	8.1	8.1	8.2	8.2	85.2	85.0	6.3	5.9	3.6	6.7	3	4	82	85	822403	809806	<0.2	<0.2	2.3	2.1
						1.0	0.9	102	28.6		8.1		8.2		84.8		6.3		3.6		4		82				<0.2		2.1	
					Middle	3.9	0.8	110	27.7	27.7	8.1	8.1	13.8	13.8	74.3	74.4	5.4		6.4		4		86				<0.2		2.1	
						3.9	0.9	112	27.7		8.1		13.7		74.4		5.4		6.5		4		86				<0.2		2.2	
					Bottom	6.8	0.7	101	27.1	27.1	8.1	8.1	21.0	21.0	70.6	70.8	5.0	5.0	9.7		4		88				<0.2		2.0	
						6.8	0.8	108	27.1		8.1		21.0		70.9		5.0		10.1		4		88				<0.2		2.1	
IM11	Fine	Moderate	14:38	10.1	Surface	1.0	0.9	114	28.4	28.4	8.2	8.2	9.0	9.0	79.8	79.8	5.9	5.3	5.3	8.1	6	5	83	86	822079	811447	<0.2	<0.2	2.1	2.1
						1.0	1.0	115	28.4		8.2		9.0		79.8		5.9		5.3		5		83				<0.2		2.2	
					Middle	5.1	0.9	114	27.0	27.0	8.1	8.1	19.5	19.5	65.9	65.9	4.7		7.7		5		85				<0.2		2.2	
						5.1	0.9	122	27.0		8.1		19.4		65.9		4.7		8.0		4		86				<0.2		2.0	
					Bottom	9.1	0.6	121	26.9	26.9	8.1	8.1	21.7	21.7	65.2	65.2	4.6	4.6	11.0		4		88				<0.2		2.1	
						9.1	0.6	128	26.9		8.1		21.7		65.2		4.6		11.2		4		88				<0.2		2.0	
IM12	Fine	Moderate	14:44	10.3	Surface	1.0	0.6	98	28.2	28.2	8.2	8.2	9.7	9.7	76.6	76.5	5.7	5.3	5.7	8.8	4	4	82	85	821458	812065	<0.2	<0.2	2.1	2.2
						1.0	0.7	101	28.2		8.2		9.7		76.3		5.7		5.9		3		83				<0.2		2.2	
					Middle	5.2	0.5	82	27.5	27.5	8.1	8.1	16.4	16.4	68.2	68.2	4.9		8.5		4		85				<0.2		2.2	
						5.2	0.5	88	27.5		8.1		16.4		68.2		4.9		8.6		4		86				<0.2		2.1	
					Bottom	9.3	0.4	97	27.0	27.0	8.1	8.1	20.6	20.6	67.2	67.3	4.8	4.8	12.0		4		87				<0.2		2.3	
						9.3	0.5	97	27.0		8.1		20.6		67.4		4.8		11.9		5		88				<0.2		2.2	
SR1A	Cloudy	Moderate	15:03	5.6	Surface	1.0	-	-	28.2	28.2	8.1	8.1	11.1	11.1	80.9	80.9	5.9	5.9	3.3	4.0	5	5	-	-	819981	812656	-	-	-	-
						1.0	-	-	28.2		8.1		11.1		80.8		5.9		3.4		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	27.9	27.9	8.1	8.1	12.7	12.7	78.7	78.7	5.8	5.8	4.7		6		-				-		-	
						4.6	-	-	27.9		8.1		12.7		78.7		5.8		4.7		5		-				-		-	
SR2	Fine	Moderate	15:15	5.1	Surface	1.0	0.6	74	28.3	28.3	8.1	8.1	9.4	9.4	78.6	78.6	5.8	5.8	3.7	4.6	5	5	84	85	821461	814164	<0.2	<0.2	2.1	2.1
						1.0	0.7	77	28.3		8.1		9.4		78.5		5.8		3.7		5		84				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.4	64	27.7	27.7	8.1	8.1	13.6	13.6	74.5	74.6	5.4	5.4	5.5		5		86				<0.2		2.2	
						4.1	0.4	68	27.7		8.1		13.6		74.6		5.4		5.5		5		87				<0.2		2.1	
SR3	Fine	Moderate	14:09	10.9	Surface	1.0	0.2	192	28.2	28.2	8.1	8.1	9.8	9.8	76.1	76.0	5.6	5.3	6.0	8.4	5	5	-	-	822154	807589	-	-	-	-
						1.0	0.2	195	28.2		8.1		9.8		75.8		5.6		6.2		6		-				-		-	
					Middle	5.5	0.4	161	27.2	27.2	8.1	8.1	17.5	17.5	68.3	68.2	4.9		8.2		4		-				-		-	
						5.5	0.5	170	27.2		8.1		17.5		68.1		4.9		8.4		5		-				-		-	
					Bottom	9.9	0.2	175	26.8	26.8	8.1	8.1	21.6	21.6	64.1	64.1	4.5	4.5	10.8		5		-				-		-	
						9.9	0.2	177	26.8		8.1		21.6		64.1		4.5		11.0		5		-				-		-	
SR4A	Cloudy	Calm	15:09	8.2	Surface	1.0	0.5	251	27.9	27.9	7.7	7.7	12.5	12.6	81.1	80.8	5.9	4.8	5.3	6.5	6	6	-	-	817209	807790	-	-	-	-
						1.0	0.6	267	27.9		7.7		12.6		80.4		5.9		5.3		6		-				-		-	
					Middle	4.1	0.2	263	25.9	25.9	7.7	7.7	26.7	26.7	52.1	52.0	3.6		6.4		6		-				-		-	
						4.1	0.2	272	25.8		7.7		26.8		51.8		3.6		6.7		6		-				-		-	
					Bottom	7.2	0.2	256	25.7	25.7	7.7	7.7	28.5	28.5	51.8	52.0	3.6	3.6	7.5		6		-				-		-	
						7.2	0.2	260	25.7		7.7		28.5		52.1		3.6		7.7		7		-				-		-	
SR5A	Cloudy	Calm	15:28	4.1	Surface	1.0	0.1	262	28.1	28.1	7.7	7.7	12.7	12.7	85.0	85.0	6.2	6.2	5.0	5.8	6	7	-	-	816609	810700	-	-	-	-
						1.0	0.1	264	28.1		7.7		12.7		84.9		6.2		5.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.2	296	27.5	27.5	7.7	7.7	15.7	15.7	75.8	76.1	5.5	5.5	6.4		7		-				-		-	
						3.1	0.2	321	27.5		7.7		15.7		76.3		5.5		6.3		7		-				-		-	
SR6A	Cloudy	Calm	15:56	4.0	Surface	1.0	0.1	246	27.5	27.5	7.7	7.7	12.5	12.5	71.6	71.4	5.3	5.3	9.6	9.8	12	12	-	-	817942	814742	-	-	-	-
						1.0	0.1	259	27.5		7.7		12.5		71.2		5.3		9.7		13		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	269	27.4	27.4	7.7	7.7	15.5	15.5	70.5	70.5	5.1	5.1	10.0		11		-				-		-	
						3.0	0.1	284	27.4		7.7		15.6		70.4		5.1		10.0		10		-				-		-	
SR7	Fine	Moderate	16:04	16.5	Surface	1.0	0.3	3	27.9	27.9	8.2	8.2	12.6	12.6	77.6	77.5	5.7	5.6	2.7	3.0	5	5	-	-	823620	823761	-	-	-	-
						1.0	0.3	3	27.9		8.2		12.6		77.3		5.7		2.7		5		-				-		-	
					Middle	8.3	0.7	33	27.7	27.7	8.2	8.2	14.4	14.4	75.7	75.7	5.5		3.0		4		-				-		-	
						8.3	0.7	33	27.7		8.2		14.4		75.7		5.5		3.0		5		-				-		-	
					Bottom	15.5	0.4	40	27.4	27.4	8.2	8.2	17.1	17.1	74.4	74.5	5.4	5.4	3.3		4		-				-		-	
						15.5	0.4	43	27.4		8.2		17.1		74.6		5.4		3.3		4		-				-		-	
SR8	Fine	Moderate	14:54	5.3	Surface	1.0	-	-	28.5	28.5	8.0	8.0	11.2	11.2	81.3	81.4	5.9	5.9	7.1	8.6	4	4	-	-	820367	811639	-	-	-	-
						1.0	-	-	28.5		8.0		11.2		81.4		5.9		7.2		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	28.3	28.3	8.0	8.0	11.8	11.8	80.6	80.7	5.9	5.9	10.0		4		-				-		-	
						4.3	-	-	28.3		8.0		11.8		80.7		5.9		10.2		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System

Water Quality Monitoring

Water Quality Monitoring Results on 09 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:00	9.3	Surface	1.0	0.3	26	27.7	27.7	7.7	7.7	10.9	10.9	77.5	77.5	5.7	4.9	5.2	6.9	8	7	83	87	815598	804227	<0.2	<0.2	1.9	1.9
						1.0	0.3	27	27.7		7.7		10.9		77.4		5.7		5.2		7		83				<0.2		2.0	
					Middle	4.7	0.7	41	25.7	25.7	7.7	7.7	23.5	23.6	57.7	57.1	4.1		6.1		7		87				<0.2		1.8	
						4.7	0.7	43	25.7		7.7		23.6		56.4		4.0		6.3		7		87				<0.2		1.9	
					Bottom	8.3	0.4	29	25.5	25.5	7.7	7.7	29.5	29.4	51.2	51.3	3.6	3.6	9.3		6		91				<0.2		1.9	
						8.3	0.4	30	25.5		7.7		29.4		51.4		3.6		9.1		6		91				<0.2		1.9	
C2	Cloudy	Moderate	09:21	13.1	Surface	1.0	0.2	313	28.0	28.0	8.1	8.1	5.4	5.5	74.5	74.5	5.7	5.5	5.9	6.4	5	5	83	85	825705	806958	<0.2	<0.2	2.1	2.2
						1.0	0.2	341	28.0		8.1		5.7		74.4		5.7		5.9		5		83				<0.2		2.1	
					Middle	6.6	0.5	341	27.6	27.6	8.1	8.1	15.7	15.6	71.6	71.6	5.2		3.8		6		85				<0.2		2.1	
						6.6	0.5	357	27.6		8.1		15.6		71.5		5.2		3.9		5		85				<0.2		2.2	
					Bottom	12.1	0.6	335	27.2	27.2	8.1	8.1	19.8	19.8	67.8	67.9	4.8	4.8	9.4		5		88				<0.2		2.2	
						12.1	0.6	308	27.2		8.1		19.8		68.0		4.8		9.4		6		87				<0.2		2.3	
C3	Cloudy	Moderate	07:33	13.0	Surface	1.0	0.4	257	27.8	27.8	8.1	8.1	10.8	10.8	77.7	77.7	5.8	5.4	3.9	5.4	4	5	83	85	822116	817813	<0.2	<0.2	2.2	2.2
						1.0	0.4	261	27.8		8.1		10.7		77.7		5.8		4.0		5		82				<0.2		2.3	
					Middle	6.5	0.4	235	27.3	27.3	8.1	8.1	18.0	17.9	69.8	69.8	5.0		4.8		4		85				<0.2		2.2	
						6.5	0.4	248	27.3		8.1		17.9		69.7		5.0		4.9		5		85				<0.2		2.3	
					Bottom	12.0	0.3	249	26.2	26.2	8.1	8.1	26.9	26.9	67.5	67.6	4.7	4.7	7.6		5		88				<0.2		2.2	
						12.0	0.3	259	26.2		8.1		26.9		67.7		4.7		7.4		5		88				<0.2		2.2	
IM1	Cloudy	Calm	09:17	5.6	Surface	1.0	0.3	12	27.7	27.7	7.7	7.7	9.7	9.7	82.0	82.0	6.1	6.1	5.6	6.0	4	5	83	85	817948	807131	<0.2	<0.2	1.9	2.0
						1.0	0.4	12	27.7		7.7		9.7		82.0		6.1		5.7		5		83				<0.2		1.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	0.2	278	27.5	27.5	7.7	7.7	12.5	12.6	81.2	81.3	6.0	6.0	6.4		6		87				<0.2		2.0	
						4.6	0.2	282	27.5		7.7		12.6		81.3		6.0		6.4		6		87				<0.2		2.0	
IM2	Cloudy	Moderate	09:24	7.9	Surface	1.0	0.3	19	27.7	27.7	7.7	7.7	9.2	9.2	78.9	78.7	5.9	5.7	5.4	7.7	6	5	82	87	818154	806163	<0.2	<0.2	2.2	2.2
						1.0	0.3	19	27.7		7.7		9.3		78.4		5.9		5.4		5		82				<0.2		2.2	
					Middle	4.0	0.3	352	27.4	27.4	7.7	7.7	14.0	14.0	73.6	73.5	5.4		8.3		5		87				<0.2		2.2	
						4.0	0.4	353	27.4		7.7		14.0		73.3		5.4		8.8		6		87				<0.2		2.3	
					Bottom	6.9	0.2	298	26.4	26.4	7.7	7.7	23.9	23.9	58.6	58.6	4.2	4.2	9.1		5		91				<0.2		2.2	
						6.9	0.3	312	26.3		7.7		23.8		58.6		4.1		9.3		5		91				<0.2		2.3	
IM3	Cloudy	Moderate	09:31	8.0	Surface	1.0	0.3	344	27.5	27.5	7.7	7.7	10.1	10.0	77.8	77.7	5.8	5.5	5.7	6.4	5	6	83	87	818777	805596	<0.2	<0.2	2.2	2.1
						1.0	0.3	316	27.5		7.7		10.0		77.6		5.8		5.8		6		83				<0.2		2.2	
					Middle	4.0	0.4	352	27.3	27.3	7.7	7.7	15.8	15.8	70.8	70.8	5.1		6.2		6		87				<0.2		2.1	
						4.0	0.5	324	27.3		7.7		15.8		70.8		5.1		6.3		5		87				<0.2		2.2	
					Bottom	7.0	0.4	327	26.7	26.7	7.7	7.7	21.1	21.0	65.8	66.0	4.7	4.7	7.2		6		90				<0.2		2.0	
						7.0	0.4	353	26.7		7.7		21.0		66.1		4.7		7.3		6		90				<0.2		2.1	
IM4	Cloudy	Moderate	09:40	9.0	Surface	1.0	0.6	3	27.8	27.8	7.7	7.7	8.7	8.7	80.0	79.9	6.0	5.3	5.1	7.9	4	5	82	86	819723	804611	<0.2	<0.2	2.2	2.1
						1.0	0.6	3	27.8		7.7		8.7		79.7		6.0		5.1		4		82				<0.2		2.0	
					Middle	4.5	0.8	339	26.9	26.9	7.7	7.7	18.9	18.9	64.9	64.8	4.7		8.7		4		86				<0.2		2.1	
						4.5	0.8	312	26.8		7.7		18.9		64.6		4.6		8.7		4		86				<0.2		2.0	
					Bottom	8.0	0.6	347	26.7	26.7	7.7	7.7	21.1	21.1	64.2	64.3	4.6	4.6	9.7		6		90				<0.2		2.0	
						8.0	0.6	319	26.7		7.7		21.1		64.4		4.6		9.8		5		91				<0.2		2.1	
IM5	Cloudy	Moderate	09:45	8.4	Surface	1.0	0.8	358	27.6	27.6	7.7	7.7	10.4	10.5	77.4	77.2	5.8	5.6	6.3	8.1	4	5	83	86	820733	804859	<0.2	<0.2	2.1	2.1
						1.0	0.9	329	27.5		7.7		10.5		77.0		5.7		6.7		5		83				<0.2		2.0	
					Middle	4.2	0.7	3	27.2	27.2	7.7	7.7	14.4	14.4	75.3	75.2	5.5		8.8		5		86				<0.2		2.0	
						4.2	0.8	3	27.2		7.7		14.3		75.1		5.5		8.7		6		86				<0.2		2.2	
					Bottom	7.4	0.4	25	27.1	27.1	7.7	7.7	17.5	17.5	71.2	71.2	5.1	5.1	9.1		6		90				<0.2		2.1	
						7.4	0.5	26	27.1		7.7		17.5		71.2		5.1		9.0		6		90				<0.2		2.1	
IM6	Cloudy	Moderate	09:52	8.2	Surface	1.0	0.1	160	27.7	27.7	7.6	7.6	9.3	9.3	76.7	76.7	5.7	5.7	6.4	7.3	5	5	82	86	821067	805815	<0.2	<0.2	2.0	2.0
						1.0	0.1	166	27.7		7.6		9.3		76.7		5.7		6.6		5		82				<0.2		2.1	
					Middle	4.1	0.4	86	27.7	27.7	7.7	7.7	10.2	10.2	75.9	75.9	5.6		7.1		5		86				<0.2		2.0	
						4.1	0.4	91	27.7		7.7		10.2		75.8		5.6		7.1		6		87				<0.2		2.1	
					Bottom	7.2	0.4	67	26.6	26.6	7.7	7.7	21.9	22.0	65.4	65.7	4.6	4.7	8.3		6		90				<0.2		2.0	
						7.2	0.4	70	26.6		7.7		22.0		65.9		4.7		8.5		5		91				<0.2		2.0	
IM7	Cloudy	Moderate	09:59	9.4	Surface	1.0	0.1	224	27.9	27.9	7.6	7.6	7.7	7.6	77.9	77.9	5.9	5.6	5.3	6.7	6	5	82	87	821343	806846	<0.2	<0.2	2.1	2.1
						1.0	0.1	243	27.9		7.6		7.6		77.9		5.9		5.4		5		82				<0.2		2.0	
					Middle	4.7	0.1	77	27.6	27.6	7.6	7.6	13.0	13.0	70.4	70.4	5.2		6.4		6		87				<0.2		2.1	
						4.7	0.1	77	27.6		7.6		13.0		70.4		5.2		6.4		5		87				<0.2		2.1	
					Bottom	8.4	0.5	71	26.3	26.3	7.7	7.7	23.9	23.9	60.0	60.3	4.2	4.3	8.2		4		91				<0.2		2.2	
						8.4	0.6	77	26.3		7.7		23.9		60.5		4.3		8.3		5		91				<0.2		2.2	
IM8	Cloudy	Moderate	08:55	8.6	Surface	1.0	0.2	255	28.0	28.0	8.2	8.2	7.0	7.0	78.3	78.3	5.9	5.7	4.5	7.3	5	5	82	85	821813	808155	<0.2	<0.2	2.2	2.4
						1.0	0.2	257	28.0		8.2		7.0		78.2		5.9		4.5		6		82				<0.2		2.2	
					Middle	4.3	0.4	256	27.8	27.8	8.1	8.1	10.1	10.1	73.7	73.7	5.5		7.5		5		86				<0.2		2.2	
						4.3	0.4	260	27.8		8.1		10.1		73.7		5.5		7.7		5		85				<0.2		2.4	
					Bottom	7.6	0.1	237	27.5	27.5	8.0	8.0	17.0	17.0	72.3	72.4	5.2	5.2	9.9		4		87				<0.2		2.5	
						7.6	0.1	253	27.5		8.0		17.0		72.5		5.2		9.6		4		88				<0.2		2.6	

DA: Depth-Averaged

Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher

Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 09 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	08:49	8.1	Surface	1.0	0.6	252	27.9	27.9	8.1	8.1	9.9	9.9	77.9	77.9	5.8	5.8	4.9	6.1	6	5	83	85	822088	808824	<0.2	<0.2	2.2	2.5
						1.0	0.6	267	27.9		8.1		9.9		77.9		5.8		4.9		5		82				<0.2		2.2	
					Middle	4.1	0.5	251	27.9	27.9	8.2	8.2	10.2	10.2	77.4	77.4	5.7		5.8		6		85				<0.2		2.5	
						4.1	0.5	268	27.9		8.2		10.2		77.4		5.7		5.8		5		84				<0.2		2.6	
					Bottom	7.1	0.5	251	27.8	27.8	8.1	8.1	11.3	11.3	79.8	80.0	5.9	5.9	7.7		5		87				<0.2		2.7	
						7.1	0.5	262	27.8		8.1		11.3		80.1		5.9		7.5		4		88				<0.2		2.7	
IM10	Cloudy	Moderate	08:42	8.7	Surface	1.0	0.5	298	27.9	27.9	8.2	8.2	10.0	10.0	76.5	76.5	5.7	5.6	4.3	6.4	5	5	82	85	822363	809782	<0.2	<0.2	2.1	2.2
						1.0	0.5	320	27.9		8.2		10.0		76.4		5.7		4.3		4		83				<0.2		2.2	
					Middle	4.4	0.7	298	27.8	27.8	8.2	8.2	11.3	11.3	73.6	73.7	5.4		6.0		5		85				<0.2		2.2	
						4.4	0.7	320	27.8		8.2		11.3		73.7		5.4		6.1		6		85				<0.2		2.2	
					Bottom	7.7	0.4	286	27.6	27.6	8.1	8.1	15.4	15.4	72.7	72.8	5.3	5.3	8.8		5		87				<0.2		2.2	
						7.7	0.4	306	27.6		8.1		15.4		72.9		5.3		8.9		6		88				<0.2		2.2	
IM11	Cloudy	Moderate	08:32	8.6	Surface	1.0	0.5	295	27.9	27.9	8.2	8.2	8.9	8.9	75.6	75.5	5.7	5.5	4.3	5.8	6	6	82	85	822047	811463	<0.2	<0.2	2.2	2.2
						1.0	0.5	313	27.9		8.2		8.9		75.4		5.6		4.3		6		83				<0.2		2.2	
					Middle	4.3	0.5	294	27.7	27.7	8.1	8.1	13.0	13.0	72.4	72.4	5.3		5.1		6		85				<0.2		2.1	
						4.3	0.6	303	27.7		8.1		13.0		72.4		5.3		5.1		6		85				<0.2		2.3	
					Bottom	7.6	0.6	277	27.2	27.2	8.1	8.1	19.8	19.8	69.7	69.8	5.0	5.0	7.9		7		87				<0.2		2.2	
						7.6	0.6	283	27.2		8.1		19.8		69.8		5.0		8.0		6		87				<0.2		2.2	
IM12	Cloudy	Moderate	08:25	8.8	Surface	1.0	0.4	307	27.9	27.9	8.2	8.2	9.4	9.4	76.4	76.4	5.7	5.7	4.2	4.7	4	5	82	85	821471	812060	<0.2	<0.2	2.3	2.2
						1.0	0.4	323	27.9		8.2		9.4		76.4		5.7		4.2		6		82				<0.2		2.1	
					Middle	4.4	0.6	306	27.8	27.8	8.2	8.2	10.9	10.9	75.3	75.3	5.6		4.4		5		85				<0.2		2.1	
						4.4	0.6	317	27.8		8.2		10.9		75.2		5.6		4.4		6		85				<0.2		2.2	
					Bottom	7.8	0.7	297	26.9	26.9	8.1	8.1	21.5	21.4	70.4	70.7	5.0	5.0	5.4		6		87				<0.2		2.2	
						7.8	0.8	297	26.9		8.1		21.4		70.9		5.0		5.4		5		87				<0.2		2.2	
SR1A	Cloudy	Moderate	08:06	5.3	Surface	1.0	-	-	27.9	27.9	8.1	8.1	9.0	9.0	79.3	79.3	5.9	5.9	4.1	4.2	6	6	-	-	819982	812656	-	-	-	-
						1.0	-	-	27.9		8.1		9.0		79.3		5.9		4.1		6		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	27.9	27.9	8.1	8.1	10.5	10.5	77.0	77.1	5.7	5.7	4.2		6		-				-		-	
						4.3	-	-	27.9		8.1		10.4		77.2		5.7		4.2		6		-				-		-	
SR2	Cloudy	Moderate	07:54	4.9	Surface	1.0	0.2	200	27.9	27.9	8.1	8.1	9.6	9.6	77.3	77.4	5.8	5.8	4.5	5.3	6	6	83	85	821477	814144	<0.2	<0.2	2.0	2.2
						1.0	0.2	203	27.9		8.1		9.6		77.4		5.8		4.5		6		83				<0.2		2.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	276	27.7	27.7	8.1	8.1	12.5	12.5	81.0	81.0	5.9	5.9	6.1		5		87				<0.2		2.3	
						3.9	0.1	285	27.7		8.1		12.5		81.0		5.9		6.2		5		86				<0.2		2.1	
SR3	Cloudy	Moderate	09:02	10.0	Surface	1.0	0.2	280	28.0	28.0	8.2	8.2	6.4	6.4	77.4	77.4	5.9	5.8	4.5	5.6	5	5	-	-	822155	807563	-	-	-	-
						1.0	0.2	285	28.0		8.2		6.4		77.4		5.9		4.6		6		-				-		-	
					Middle	5.0	0.2	271	27.9	27.9	8.1	8.1	9.2	9.2	74.6	74.6	5.6		5.3		4		-				-		-	
						5.0	0.2	294	27.9		8.1		9.2		74.5		5.6		5.4		6		-				-		-	
					Bottom	9.0	0.1	299	27.5	27.5	8.0	8.0	17.4	17.4	68.9	68.9	4.9	4.9	7.0		5		-				-		-	
						9.0	0.1	316	27.5		8.0		17.3		68.9		4.9		6.9		5		-				-		-	
SR4A	Cloudy	Moderate	08:38	9.9	Surface	1.0	0.1	211	27.4	27.4	7.7	7.7	13.6	13.7	77.6	77.5	5.7	5.6	8.6	11.0	6	7	-	-	817175	807786	-	-	-	-
						1.0	0.1	218	27.4		7.7		13.7		77.3		5.7		8.7		6		-				-		-	
					Middle	5.0	0.2	245	27.3	27.3	7.7	7.7	14.4	14.4	74.5	74.4	5.5		10.4		6		-				-		-	
						5.0	0.2	246	27.2		7.7		14.4		74.3		5.5		10.5		8		-				-		-	
					Bottom	8.9	0.1	239	26.9	27.0	7.6	7.6	24.2	24.2	62.2	62.8	4.3	4.4	13.8		9		-				-		-	
						8.9	0.1	240	27.0		7.6		24.1		63.3		4.4		13.8		8		-				-		-	
SR5A	Cloudy	Calm	08:22	3.5	Surface	1.0	0.3	280	27.5	27.5	7.6	7.6	13.7	13.7	79.4	79.4	5.8	5.8	8.6	9.3	5	6	-	-	816616	810679	-	-	-	-
						1.0	0.3	286	27.5		7.6		13.7		79.4		5.8		8.7		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.3	286	27.6	27.6	7.6	7.6	13.8	13.8	80.3	80.4	5.9	5.9	10.1		7		-				-		-	
						2.5	0.3	299	27.6		7.6		13.8		80.5		5.9		10.0		7		-				-		-	
SR6A	Cloudy	Calm	07:51	4.5	Surface	1.0	0.1	206	27.6	27.6	7.6	7.6	11.8	11.8	78.4	78.4	5.8	5.8	5.3	6.2	6	6	-	-	817966	814754	-	-	-	-
						1.0	0.1	219	27.6		7.6		11.9		78.3		5.8		5.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	244	27.6	27.6	7.6	7.6	12.1	12.1	77.5	77.4	5.7	5.7	7.1		5		-				-		-	
						3.5	0.0	257	27.6		7.6		12.1		77.2		5.7		7.1		6		-				-		-	
SR7	Cloudy	Moderate	07:03	15.8	Surface	1.0	0.0	8	27.9	27.9	8.2	8.2	10.1	10.1	77.6	77.6	5.8	5.2	3.3	2.5	5	5	-	-	823627	823747	-	-	-	-
						1.0	0.0	8	27.9		8.2		10.1		77.5		5.8		3.3		5		-				-		-	
					Middle	7.9	0.0	181	26.9	26.9	8.1	8.1	21.3	21.3	64.9	64.8	4.6		2.1		6		-				-		-	
						7.9	0.0	183	26.9		8.1		21.3		64.7		4.6		2.1		5		-				-		-	
					Bottom	14.8	0.1	161	25.7	25.7	8.1	8.1	29.6	29.6	58.8	58.8	4.1	4.1	2.0		5		-				-		-	
						14.8	0.1	168	25.7		8.1		29.6		58.8		4.1		1.9		6		-				-		-	
SR8	Cloudy	Calm	08:17	4.5	Surface	1.0	-	-	27.9	27.9	8.1	8.1	9.5	9.5	77.5	77.5	5.8	5.8	4.2	4.3	7	8	-	-	820392	811622	-	-	-	-
						1.0	-	-	27.9		8.1		9.5		77.5		5.8		4.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	27.9	27.9	8.2	8.2	9.7	9.7	76.7	76.8	5.7	5.7	4.3		8		-				-		-	
						3.5	-	-	27.9		8.2		9.7		76.8		5.7		4.4		7		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	16:19	9.4	Surface	1.0	0.7	154	29.6	29.6	7.8	7.8	4.1	4.1	77.0	76.9	5.7	4.8	13.5	10.0	9	8	84	88	815611	804240	<0.2	<0.2	2.4	2.5
						1.0	0.7	154	29.5		7.8		4.1		76.7		5.7		13.4		9		84				<0.2		2.5	
					Middle	4.7	0.6	198	26.8	26.8	7.9	7.9	18.3	18.3	53.7	53.6	3.9		5.7		9		88				<0.2		2.5	
						4.7	0.6	211	26.8		7.9		18.3		53.5		3.9		5.7		9		89				<0.2		2.5	
					Bottom	8.4	0.5	217	25.1	25.1	7.9	7.9	29.8	29.8	42.7	42.8	3.0	3.0	10.8		7		92				<0.2		2.4	
						8.4	0.5	224	25.1		7.9		29.8		42.8		3.0		10.7		6		93				<0.2		2.5	
C2	Fine	Moderate	15:21	12.5	Surface	1.0	0.8	181	28.1	28.1	8.1	8.1	5.4	5.4	59.9	59.7	4.5	4.3	12.0	9.4	10	10	83	86	825702	806955	<0.2	<0.2	2.5	2.5
						1.0	0.8	192	28.0		8.1		5.4		59.5		4.5		11.7		10		84				<0.2		2.6	
					Middle	6.3	0.6	178	26.3	26.4	8.2	8.1	22.5	22.4	56.0	56.0	4.0		4.2		10		87				<0.2		2.4	
						6.3	0.7	187	26.4		8.1		22.4		56.0		4.0		4.2		9		86				<0.2		2.5	
					Bottom	11.5	0.4	158	25.6	25.6	8.2	8.2	27.3	27.3	53.0	53.1	3.7	3.7	12.3		9		89				<0.2		2.4	
						11.5	0.4	163	25.6		8.2		27.3		53.1		3.7		12.0		10		89				<0.2		2.4	
C3	Fine	Moderate	17:16	12.3	Surface	1.0	0.3	280	28.8	28.8	8.1	8.1	10.1	10.1	73.3	73.2	5.4	4.9	5.0	5.1	5	5	84	87	822096	817820	<0.2	<0.2	2.4	2.5
						1.0	0.3	294	28.8		8.1		10.1		73.0		5.3		5.0		4		85				<0.2		2.4	
					Middle	6.2	0.3	307	27.0	27.0	8.1	8.1	17.9	17.9	60.9	60.9	4.4		4.4		5		87				<0.2		2.4	
						6.2	0.4	335	27.0		8.1		17.9		60.9		4.4		4.5		6		88				<0.2		2.5	
					Bottom	11.3	0.3	133	25.0	25.0	8.2	8.2	30.5	30.5	54.7	54.8	3.8	3.8	6.0		5		89				<0.2		2.5	
						11.3	0.3	141	25.0		8.2		30.5		54.9		3.8		5.9		6		90				<0.2		2.6	
IM1	Sunny	Calm	15:58	5.4	Surface	1.0	0.0	12	28.7	28.7	8.1	8.1	10.6	10.6	85.5	85.4	6.2	6.2	6.7	7.5	7	7	89	91	817927	807148	<0.2	<0.2	2.4	2.4
						1.0	0.0	12	28.7		8.1		10.6		85.3		6.2		6.7		7		89				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.1	209	25.5	25.5	7.9	7.9	28.2	28.2	46.8	46.9	3.3	3.3	8.3		7		92				<0.2		2.3	
						4.4	0.1	214	25.5		7.9		28.2		47.0		3.3		8.3		7		93				<0.2		2.4	
IM2	Sunny	Moderate	15:52	7.4	Surface	1.0	0.0	181	26.9	26.9	7.9	7.9	19.4	19.5	53.5	53.0	3.8	**3.5**	13.1	14.6	6	6	87	89	818151	806155	<0.2	<0.2	2.5	2.4
						1.0	0.0	196	26.9		7.9		19.6		52.5		3.8		12.8		7		87				<0.2		2.4	
					Middle	3.7	0.2	172	25.4	25.4	7.9	7.9	28.2	28.3	44.3	44.3	3.1		14.5		6		88				<0.2		2.3	
						3.7	0.2	183	25.4		7.9		28.4		44.2		3.1		15.9		6		88				<0.2		2.5	
					Bottom	6.4	0.1	149	25.3	25.3	7.9	7.9	29.2	29.2	45.7	45.8	3.2	3.2	15.7		6		91				<0.2		2.3	
						6.4	0.2	158	25.3		7.9		29.2		45.9		3.2		15.5		6		91				<0.2		2.4	
IM3	Sunny	Moderate	15:46	7.6	Surface	1.0	0.2	176	27.5	27.5	7.9	7.9	15.3	15.3	63.4	63.4	4.6	**3.9**	6.2	9.0	8	8	88	91	818795	805572	<0.2	<0.2	2.5	2.5
						1.0	0.2	176	27.5		7.9		15.3		63.4		4.6		6.2		8		88				<0.2		2.5	
					Middle	3.8	0.3	162	25.4	25.4	7.9	7.9	28.5	28.5	44.4	44.5	3.1		8.3		8		92				<0.2		2.4	
						3.8	0.3	176	25.4		7.9		28.6		44.5		3.1		8.5		9		92				<0.2		2.5	
					Bottom	6.6	0.2	101	25.4	25.4	7.8	7.8	29.0	28.9	45.4	45.5	3.2	3.2	12.4		8		92				<0.2		2.4	
						6.6	0.2	110	25.4		7.8		28.9		45.6		3.2		12.2		9		94				<0.2		2.6	
IM4	Sunny	Moderate	15:38	8.6	Surface	1.0	1.1	201	28.7	28.8	7.8	7.7	7.0	7.0	66.0	66.3	4.9	4.1	11.3	12.3	8	7	84	89	819720	804585	<0.2	<0.2	2.4	2.5
						1.0	1.2	203	28.8		7.7		7.0		66.6		4.9		11.5		8		86				<0.2		2.6	
					Middle	4.3	0.7	183	25.8	25.8	7.9	7.9	25.3	25.3	45.3	45.3	3.2		11.6		6		89				<0.2		2.5	
						4.3	0.7	201	25.8		7.9		25.4		45.3		3.2		11.6		7		90				<0.2		2.4	
					Bottom	7.6	0.5	166	25.4	25.4	7.9	7.9	27.9	27.9	45.2	45.3	3.2	3.2	13.8		6		93				<0.2		2.4	
						7.6	0.5	167	25.4		7.9		27.9		45.4		3.2		13.8		6		94				<0.2		2.5	
IM5	Sunny	Moderate	15:31	8.1	Surface	1.0	0.9	217	27.6	27.6	7.8	7.8	11.6	11.6	58.6	58.5	4.3	**3.9**	6.4	8.3	10	12	87	90	820738	804873	<0.2	<0.2	2.5	2.5
						1.0	0.9	223	27.6		7.8		11.6		58.4		4.3		6.4		10		86				<0.2		2.5	
					Middle	4.1	0.6	205	26.2	26.2	7.8	7.8	23.3	23.3	49.8	49.9	3.5		8.0		12		89				<0.2		2.5	
						4.1	0.6	215	26.2		7.8		23.3		50.0		3.5		8.1		12		90				<0.2		2.5	
					Bottom	7.1	0.5	210	26.2	26.2	7.8	7.8	23.6	23.6	51.3	51.4	3.6	3.6	10.4		13		92				<0.2		2.5	
						7.1	0.6	210	26.2		7.8		23.6		51.5		3.6		10.5		12		94				<0.2		2.4	
IM6	Sunny	Moderate	15:25	8.0	Surface	1.0	0.5	227	27.2	27.2	7.8	7.8	10.9	11.0	59.1	59.0	4.4	4.2	7.9	9.5	9	10	83	89	821042	805835	<0.2	<0.2	2.6	2.5
						1.0	0.5	246	27.2		7.8		11.0		58.8		4.4		8.0		10		83				<0.2		2.5	
					Middle	4.0	0.6	247	26.6	26.6	7.8	7.8	18.1	18.1	54.2	54.2	3.9		9.0		10		90				<0.2		2.4	
						4.0	0.6	259	26.5		7.8		18.1		54.2		3.9		9.2		9		91				<0.2		2.5	
					Bottom	7.0	0.4	214	26.3	26.4	7.8	7.8	25.4	25.4	48.9	49.1	3.4	3.4	11.6		9		93				<0.2		2.5	
						7.0	0.5	226	26.4		7.8		25.3		49.3		3.4		11.6		10		93				<0.2		2.6	
IM7	Sunny	Moderate	15:18	9.0	Surface	1.0	0.2	236	27.4	27.4	7.8	7.8	8.0	8.0	61.6	61.4	4.7	4.3	7.9	8.9	7	8	82	84	821344	806856	<0.2	<0.2	2.4	2.5
						1.0	0.2	239	27.3		7.8		8.0		61.2		4.6		7.9		8		81				<0.2		2.4	
					Middle	4.5	0.4	253	26.8	26.8	7.8	7.8	18.5	18.5	55.8	55.8	4.0		9.2		8		84				<0.2		2.5	
						4.5	0.4	256	26.7		7.8		18.5		55.8		4.0		9.2		8		83				<0.2		2.5	
					Bottom	8.0	0.3	224	26.1	26.1	7.8	7.8	25.0	25.0	50.1	50.2	3.5	3.5	9.7		8		88				<0.2		2.5	
						8.0	0.3	239	26.1		7.8		25.0		50.3		3.5		9.6		8		88				<0.2		2.6	
IM8	Fine	Moderate	15:48	8.2	Surface	1.0	0.2	191	28.2	28.2	8.0	8.0	6.6	6.6	63.7	63.7	4.8	4.5	8.7	7.9	9	8	85	87	821851	808142	<0.2	<0.2	2.4	2.5
						1.0	0.2	196	28.2		8.1		6.6		63.6		4.8		8.7		9		84				<0.2		2.7	
					Middle	4.1	0.1	159	27.3	27.3	8.1	8.1	14.9	14.9	56.8	56.8	4.1		6.2		8		86				<0.2		2.4	
						4.1	0.1	170	27.3		8.1		15.0		56.7		4.1		6.2		6		87				<0.2		2.5	
					Bottom	7.2	0.1	261	26.6	26.6	8.1	8.1	20.6	20.6	52.0	52.1	3.7	3.7	8.9		8		88				<0.2		2.5	
						7.2	0.1	271	26.6		8.1		20.6		52.2		3.7		8.9		7		89				<0.2		2.5	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	15:56	7.9	Surface	1.0	0.4	147	28.8	28.8	8.0	8.0	6.0	6.1	68.0	68.0	5.1	4.9	8.3	7.7	7	7	85	87	822084	808794	<0.2	<0.2	2.5	2.6
						1.0	0.5	148	28.8		8.0		6.1		67.9		5.1		8.3		6		84				<0.2		2.4	
					Middle	4.0	0.4	137	27.8	27.9	8.0	8.0	14.8	14.2	63.2	63.2	4.6		5.0		7		86				<0.2		2.6	
						4.0	0.4	144	27.9		8.0		13.6		63.2		4.6		5.1		6		87				<0.2		2.6	
					Bottom	6.9	0.4	93	26.6	26.6	8.1	8.0	20.9	20.9	54.4	54.5	3.9	3.9	9.7		7		89				<0.2		2.6	
						6.9	0.4	98	26.6		8.0		20.9		54.6		3.9		9.6		7		89				<0.2		2.6	
IM10	Fine	Moderate	16:04	7.8	Surface	1.0	0.7	120	28.6	28.6	8.0	8.0	6.3	6.6	66.4	66.4	5.0	5.0	9.3	9.4	8	8	85	87	822390	809783	<0.2	<0.2	2.4	2.5
						1.0	0.7	131	28.5		8.0		6.8		66.4		5.0		9.1		7		84				<0.2		2.4	
					Middle	3.9	0.6	106	28.3	28.3	8.0	8.0	8.0	7.9	66.4	66.4	4.9		7.5		7		87				<0.2		2.5	
						3.9	0.6	106	28.3		8.0		7.9		66.4		5.0		7.5		8		88				<0.2		2.5	
					Bottom	6.8	0.5	98	26.8	26.8	8.1	8.1	19.6	19.6	55.0	55.0	3.9	3.9	11.3		7		89				<0.2		2.5	
						6.8	0.5	105	26.8		8.1		19.6		55.0		3.9		11.4		8		89				<0.2		2.6	
IM11	Fine	Moderate	16:14	8.8	Surface	1.0	0.9	112	28.7	28.7	8.1	8.1	5.8	5.7	66.5	66.5	5.0	4.5	10.5	9.8	8	8	85	87	822078	811473	<0.2	<0.2	2.6	2.6
						1.0	1.0	118	28.7		8.1		5.7		66.5		5.0		10.4		8		84				<0.2		2.5	
					Middle	4.4	0.7	93	27.0	27.0	8.1	8.1	18.3	18.4	55.7	55.7	4.0		7.1		7		87				<0.2		2.6	
						4.4	0.8	101	27.0		8.1		18.4		55.6		4.0		7.1		8		87				<0.2		2.6	
					Bottom	7.8	0.2	89	26.0	26.0	8.2	8.2	24.8	24.8	52.9	52.9	3.7	3.7	11.8		8		89				<0.2		2.6	
						7.8	0.2	97	26.0		8.2		24.8		52.9		3.7		11.9		7		90				<0.2		2.6	
IM12	Fine	Moderate	16:21	10.1	Surface	1.0	0.7	101	29.0	29.0	8.1	8.1	5.6	5.6	69.1	69.1	5.2	4.7	9.1	8.9	7	7	84	86	821454	812054	<0.2	<0.2	2.4	2.5
						1.0	0.8	106	29.0		8.1		5.6		69.0		5.1		9.1		6		84				<0.2		2.6	
					Middle	5.1	0.7	99	27.5	27.5	8.2	8.2	14.6	14.4	59.0	59.1	4.3		7.1		7		86				<0.2		2.6	
						5.1	0.7	101	27.5		8.2		14.2		59.1		4.3		7.1		8		87				<0.2		2.5	
					Bottom	9.1	0.2	118	25.4	25.4	8.2	8.2	28.7	28.7	54.2	54.4	3.8	3.8	10.6		8		88				<0.2		2.6	
						9.1	0.2	128	25.4		8.2		28.7		54.5		3.8		10.6		7		89				<0.2		2.5	
SR1A	Fine	Moderate	16:41	5.5	Surface	1.0	-	-	29.2	29.2	8.0	8.0	6.7	6.7	79.2	79.1	5.9	5.9	6.8	6.4	6	6	-	-	819976	812659	-	-	-	-
						1.0	-	-	29.2		8.0		6.7		79.0		5.8		6.8		6		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	27.7	27.7	8.0	8.0	12.3	12.3	61.2	61.0	4.5	4.5	6.0		6		-				-		-	
						4.5	-	-	27.7		8.0		12.4		60.8		4.5		6.0		6		-				-		-	
SR2	Fine	Moderate	16:54	4.9	Surface	1.0	0.4	88	29.1	29.1	7.9	7.9	5.5	5.5	69.1	69.1	5.1	5.1	9.3	8.6	8	8	85	86	821478	814146	<0.2	<0.2	2.5	2.5
						1.0	0.4	89	29.1		7.9		5.5		69.0		5.1		9.4		7		85				<0.2		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.3	83	27.6	27.6	7.9	7.9	12.6	12.6	59.7	59.8	4.4	4.4	7.8		8		87				<0.2		2.5	
						3.9	0.3	86	27.6		7.9		12.5		59.9		4.4		7.8		9		87				<0.2		2.5	
SR3	Fine	Moderate	15:39	9.4	Surface	1.0	0.3	205	28.5	28.5	8.0	8.0	6.9	6.9	65.2	65.2	4.9	4.4	8.0	12.4	8	7	-	-	822163	807579	-	-	-	-
						1.0	0.4	211	28.5		8.0		6.9		65.1		4.9		8.0		8		-				-		-	
					Middle	4.7	0.2	173	26.9	26.9	8.1	8.1	18.4	18.4	53.2	53.2	3.8		9.4		8		-				-		-	
						4.7	0.3	175	26.9		8.1		18.5		53.2		3.8		9.5		7		-				-		-	
					Bottom	8.4	0.1	226	26.3	26.3	8.1	8.1	23.6	23.6	52.4	52.5	3.7	3.7	19.7		6		-				-		-	
						8.4	0.1	226	26.3		8.1		23.6		52.6		3.7		19.7		7		-				-		-	
SR4A	Sunny	Calm	16:40	9.3	Surface	1.0	0.7	236	28.9	28.9	7.9	7.9	9.0	9.0	73.9	73.8	5.4	4.2	7.7	10.9	8	7	-	-	817184	807813	-	-	-	-
						1.0	0.7	250	28.9		7.9		8.9		73.7		5.4		7.6		8		-				-		-	
					Middle	4.7	0.1	358	25.3	25.3	7.9	7.9	28.9	28.9	43.3	43.4	3.0		11.2		8		-				-		-	
						4.7	0.1	329	25.3		7.9		28.9		43.5		3.0		11.6		7		-				-		-	
					Bottom	8.3	0.0	201	25.5	25.6	7.8	7.8	29.0	28.9	45.4	45.5	3.2	3.2	13.9		6		-				-		-	
						8.3	0.0	209	25.6		7.8		28.9		45.6		3.2		13.5		6		-				-		-	
SR5A	Sunny	Calm	16:59	3.9	Surface	1.0	0.1	266	28.6	28.6	7.9	7.9	9.8	9.9	85.4	85.0	6.3	6.3	8.2	9.8	5	5	-	-	816610	810712	-	-	-	-
						1.0	0.1	283	28.5		7.9		9.9		84.5		6.2		8.4		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.1	316	28.3	28.4	7.9	7.9	12.2	12.3	72.5	72.7	5.3	5.3	11.2		5		-				-		-	
						2.9	0.1	334	28.4		7.9		12.3		72.8		5.3		11.4		5		-				-		-	
SR6A	Sunny	Calm	17:26	4.3	Surface	1.0	0.1	7	29.2	29.2	7.9	7.9	7.7	7.7	79.1	79.2	5.8	5.8	7.7	8.4	6	6	-	-	817949	814728	-	-	-	-
						1.0	0.1	7	29.2		7.9		7.7		79.2		5.8		7.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	346	28.5	28.4	7.9	7.9	8.0	8.0	77.5	77.1	5.8	5.8	8.7		6		-				-		-	
						3.3	0.1	318	28.3		7.9		8.0		76.6		5.7		9.3		6		-				-		-	
SR7	Fine	Moderate	17:45	15.4	Surface	1.0	0.4	85	28.7	28.7	8.1	8.1	7.7	7.8	80.2	79.2	6.0	5.5	4.9	5.1	4	5	-	-	823631	823761	-	-	-	-
						1.0	0.4	86	28.6		8.1		7.8		78.2		5.8		4.9		4		-				-		-	
					Middle	7.7	0.3	80	28.1	28.1	8.1	8.1	12.0	11.6	67.6	67.6	5.0		4.9		5		-				-		-	
						7.7	0.3	87	28.1		8.1		11.2		67.5		5.0		5.0		5		-				-		-	
					Bottom	14.4	0.1	145	26.2	26.2	8.1	8.1	23.3	23.3	60.0	60.1	4.3	4.3	5.5		5		-				-		-	
						14.4	0.1	153	26.2		8.1		23.3		60.2		4.3		5.5		5		-				-		-	
SR8	Fine	Moderate	16:31	4.9	Surface	1.0	-	-	29.1	29.1	8.0	8.0	5.9	5.9	73.9	73.8	5.5	5.5	12.0	14.0	6	8	-	-	820378	811623	-	-	-	-
						1.0	-	-	29.1		8.0		5.9		73.7		5.5		12.2		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	27.5	27.5	8.0	8.0	14.3	14.3	59.2	59.3	4.3	4.3	15.9		9		-				-		-	
						3.9	-	-	27.5		8.0		14.3		59.3		4.3		15.9		8		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	09:42	8.9	Surface	1.0	0.4	100	27.6	27.6	7.7	7.7	4.6	4.6	60.1	60.1	4.6	4.5	8.6	7.7	6	6	84	89	815598	804250	<0.2	<0.2	2.4	2.4
						1.0	0.4	109	27.6		7.7		4.6		60.0		4.6		8.6		6		85				<0.2		2.4	
					Middle	4.5	0.3	33	27.6	27.6	7.7	7.8	5.7	5.6	57.2	57.4	4.4		7.9		6		90				<0.2		2.5	
						4.5	0.3	35	27.6		7.8		5.5		57.5		4.4		7.8		6		89				<0.2		2.4	
					Bottom	7.9	0.3	16	27.6	27.6	7.8	7.8	11.1	11.1	56.9	56.8	4.2	4.2	6.8		6		93				<0.2		2.5	
						7.9	0.3	17	27.6		7.8		11.0		56.7		4.2		6.8		6		94				<0.2		2.4	
C2	Fine	Moderate	10:46	12.6	Surface	1.0	0.2	320	27.5	27.5	7.8	7.8	3.1	3.1	56.3	56.4	4.4	4.4	10.3	9.9	8	9	83	85	825682	806968	<0.2	<0.2	2.5	2.5
						1.0	0.2	340	27.5		7.8		3.1		56.5		4.4		10.2		8		83				<0.2		2.5	
					Middle	6.3	0.5	325	27.1	27.1	8.0	8.0	17.3	17.3	59.4	59.4	4.3		8.5		8		85				<0.2		2.5	
						6.3	0.5	325	27.1		8.0		17.3		59.3		4.3		8.5		8		85				<0.2		2.5	
					Bottom	11.6	0.3	354	26.4	26.4	8.0	8.0	22.7	22.7	54.7	54.8	3.9	3.9	11.0		10		87				<0.2		2.4	
						11.6	0.3	326	26.4		8.0		22.6		54.9		3.9		10.8		9		87				<0.2		2.5	
C3	Fine	Moderate	08:44	12.6	Surface	1.0	0.3	282	28.3	28.3	8.0	8.0	7.3	7.3	70.5	70.5	5.3	4.9	6.1	5.6	5	6	84	86	822087	817801	<0.2	<0.2	2.2	2.2
						1.0	0.3	288	28.3		8.0		7.2		70.4		5.3		6.1		5		84				<0.2		2.1	
					Middle	6.3	0.2	246	27.2	27.2	8.1	8.1	16.7	16.7	60.5	60.5	4.4		5.1		5		86				<0.2		2.1	
						6.3	0.2	250	27.2		8.1		16.7		60.5		4.4		5.3		6		86				<0.2		2.2	
					Bottom	11.6	0.3	264	25.4	25.4	8.1	8.1	28.6	28.6	56.0	56.1	3.9	3.9	5.4		6		88				<0.2		2.3	
						11.6	0.4	281	25.4		8.1		28.6		56.2		3.9		5.4		6		88				<0.2		2.2	
IM1	Sunny	Calm	10:02	5.2	Surface	1.0	0.1	325	28.0	27.9	7.9	7.9	9.6	9.6	73.4	73.3	5.5	5.5	7.0	8.1	6	6	87	90	817949	807154	<0.2	<0.2	2.1	2.1
						1.0	0.1	355	27.8		7.9		9.6		73.2		5.5		7.8		6		87				<0.2		2.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.2	265	26.6	26.6	7.7	7.7	21.3	21.3	57.4	57.9	4.1	4.2	8.6		6		92				<0.2		2.1	
						4.2	0.2	288	26.6		7.7		21.2		58.3		4.2		8.8		5		93				<0.2		2.1	
IM2	Sunny	Moderate	10:11	7.8	Surface	1.0	0.9	7	27.6	27.6	7.8	7.8	10.8	10.8	61.9	61.9	4.6	4.4	6.8	6.8	6	6	86	90	818171	806186	<0.2	<0.2	2.2	2.2
						1.0	1.0	7	27.5		7.8		10.9		61.9		4.6		6.7		6		88				<0.2		2.1	
					Middle	3.9	0.7	14	27.0	27.0	7.9	7.9	16.5	16.5	56.1	56.0	4.1		6.9		6		90				<0.2		2.2	
						3.9	0.7	14	27.0		7.9		16.4		55.9		4.1		7.0		7		91				<0.2		2.1	
					Bottom	6.8	0.3	351	26.5	26.5	7.9	7.9	20.3	20.0	53.6	53.6	3.8	3.8	6.7		6		91				<0.2		2.2	
						6.8	0.3	323	26.5		7.9		19.7		53.5		3.8		6.6		7		92				<0.2		2.1	
IM3	Sunny	Moderate	10:19	7.6	Surface	1.0	0.7	315	27.5	27.5	7.8	7.8	12.9	12.9	59.7	59.5	4.4	4.3	6.3	6.0	6	6	85	89	818768	805606	<0.2	<0.2	2.3	2.3
						1.0	0.8	322	27.4		7.8		12.9		59.3		4.4		6.2		6		85				<0.2		2.4	
					Middle	3.8	0.5	325	27.0	27.0	7.9	7.9	17.3	17.3	56.0	56.0	4.1		5.9		6		89				<0.2		2.3	
						3.8	0.6	338	27.0		7.9		17.3		56.0		4.1		5.9		6		89				<0.2		2.4	
					Bottom	6.6	0.4	308	25.8	25.9	7.8	7.8	26.1	26.0	48.6	48.7	3.4	3.4	5.8		6		94				<0.2		2.3	
						6.6	0.4	312	25.9		7.8		25.9		48.8		3.4		5.8		6		93				<0.2		2.3	
IM4	Sunny	Moderate	10:26	8.7	Surface	1.0	0.8	303	27.9	27.9	7.9	7.9	11.1	11.1	64.2	64.2	4.7	4.4	5.9	6.5	5	5	86	90	819737	804610	<0.2	<0.2	2.3	2.3
						1.0	0.9	323	27.9		7.9		11.1		64.2		4.7		5.9		4		86				<0.2		2.4	
					Middle	4.4	0.7	323	26.9	27.0	7.8	7.8	18.2	18.1	55.5	55.6	4.0		6.0		5		89				<0.2		2.3	
						4.4	0.8	331	27.0		7.9		18.1		55.6		4.0		6.1		4		90				<0.2		2.3	
					Bottom	7.7	0.6	323	25.7	25.7	7.8	7.8	27.3	27.3	50.3	50.5	3.5	3.5	7.5		4		94				<0.2		2.3	
						7.7	0.6	326	25.7		7.8		27.2		50.6		3.5		7.7		5		93				<0.2		2.3	
IM5	Sunny	Moderate	10:32	8.2	Surface	1.0	0.5	350	28.2	28.2	7.9	7.9	8.9	8.9	70.0	69.9	5.2	4.7	8.5	10.1	8	8	84	90	820721	804856	<0.2	<0.2	2.3	2.3
						1.0	0.6	354	28.2		7.9		9.0		69.8		5.2		8.6		8		85				<0.2		2.3	
					Middle	4.1	0.6	16	26.7	26.7	7.9	7.9	21.1	20.8	57.3	57.4	4.1		10.5		7		90				<0.2		2.3	
						4.1	0.6	16	26.7		7.9		20.5		57.5		4.1		10.5		8		92				<0.2		2.2	
					Bottom	7.2	0.5	34	25.8	25.8	7.8	7.8	26.2	26.1	50.3	50.5	3.5	3.6	11.2		8		92				<0.2		2.2	
						7.2	0.5	35	25.8		7.8		26.1		50.7		3.6		11.1		7		94				<0.2		2.3	
IM6	Sunny	Moderate	10:40	8.0	Surface	1.0	0.2	271	27.9	27.9	7.8	7.8	3.8	3.8	63.1	62.9	4.9	4.6	7.8	8.7	10	10	86	90	821057	805847	<0.2	<0.2	2.3	2.3
						1.0	0.3	293	27.9		7.9		3.8		62.7		4.8		8.0		10		86				<0.2		2.3	
					Middle	4.0	0.0	310	27.6	27.6	7.8	7.8	10.6	10.7	59.1	59.0	4.4		8.1		10		89				<0.2		2.3	
						4.0	0.0	318	27.6		7.8		10.7		58.8		4.4		8.0		10		90				<0.2		2.2	
					Bottom	7.0	0.1	112	25.7	25.7	7.8	7.8	26.9	26.9	47.6	47.9	3.3	3.4	10.2		9		94				<0.2		2.2	
						7.0	0.1	116	25.7		7.8		26.9		48.1		3.4		10.2		10		93				<0.2		2.3	
IM7	Sunny	Moderate	10:49	9.0	Surface	1.0	0.3	275	28.0	28.0	7.9	7.9	3.7	3.7	61.8	61.7	4.7	4.5	10.8	10.4	10	9	86	90	821365	806831	<0.2	<0.2	2.4	2.5
						1.0	0.3	291	27.9		7.9		3.7		61.5		4.7		10.9		10		87				<0.2		2.4	
					Middle	4.5	0.4	267	27.7	27.7	7.8	7.8	10.4	10.2	58.0	58.0	4.3		9.8		10		90				<0.2		2.5	
						4.5	0.4	293	27.7		7.8		10.0		57.9		4.3		9.9		9		91				<0.2		2.4	
					Bottom	8.0	0.1	87	26.2	26.2	7.8	7.8	24.9	24.9	46.3	46.5	3.3	3.3	10.6		8		94				<0.2		2.5	
						8.0	0.1	95	26.2		7.8		24.8		46.6		3.3		10.3		9		94				<0.2		2.5	
IM8	Fine	Moderate	10:15	8.3	Surface	1.0	0.3	243	27.9	27.9	8.0	8.0	3.0	3.0	60.9	60.9	4.7	4.6	10.4	14.4	10	9	83	85	821833	808143	<0.2	<0.2	2.4	2.4
						1.0	0.3	263	27.9		8.0		3.0		60.9		4.7		10.1		10		83				<0.2		2.4	
					Middle	4.2	0.1	301	27.8	27.8	8.0	8.0	7.8	7.6	59.6	59.6	4.5		14.8		8		86				<0.2		2.5	
						4.2	0.1	319	27.7		8.0		7.5		59.6		4.5		15.2		10		85				<0.2		2.4	
					Bottom	7.3	0.2	92	27.1	27.1	8.0	8.0	17.6	17.6	54.5	54.6	3.9	3.9	17.9		7		87				<0.2		2.4	
						7.3	0.2	93	27.1		8.0		17.6		54.6		3.9		18.0		8		87				<0.2		2.5	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 11 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	10:08	7.8	Surface	1.0	0.2	265	28.2	28.2	8.0	8.0	2.5	2.5	62.5	62.6	4.8	4.8	10.1	12.4	9	9	84	85	822076	808813	<0.2	<0.2	2.5	2.5
						1.0	0.2	271	28.2		8.0		2.5		62.6		4.8		10.2		9		83							
					Middle	3.9	0.3	278	28.0	28.0	8.0	8.0	5.0	5.0	62.5	62.5	4.8		12.3		9		86						2.4	
						3.9	0.3	283	28.0		8.0		5.0		62.4		4.8		12.4		9		85				<0.2		2.4	
					Bottom	6.8	0.3	267	27.2	27.2	7.8	7.8	16.8	16.8	54.1	54.3	3.9	3.9	14.5		8		87						2.4	
						6.8	0.3	273	27.2		7.8		16.8		54.4		3.9		14.8		8		87				<0.2		2.5	
IM10	Fine	Moderate	10:01	8.5	Surface	1.0	0.4	284	28.1	28.1	7.9	7.9	4.5	4.5	62.9	62.9	4.8	4.7	13.4	12.4	6	9	83	85	822381	809781	<0.2	<0.2	2.7	2.7
						1.0	0.4	292	28.0		7.9		4.5		62.8		4.8		13.2		7		84				<0.2		2.7	
					Middle	4.3	0.6	297	27.6	27.6	8.0	8.0	9.8	9.8	59.9	59.9	4.5		11.1		9		85				<0.2		2.7	
						4.3	0.6	316	27.6		8.0		9.8		59.8		4.5		10.9		10		85				<0.2		2.6	
					Bottom	7.5	0.4	290	27.1	27.1	8.1	8.1	17.6	17.6	57.9	58.0	4.2	4.2	12.9		11		87				<0.2		2.8	
						7.5	0.4	316	27.1		8.1		17.6		58.0		4.2		12.9		10		88				<0.2		2.6	
IM11	Fine	Moderate	09:48	8.6	Surface	1.0	0.3	284	28.0	28.0	8.0	8.0	5.1	5.1	63.7	63.6	4.8	4.7	12.9	12.4	8	10	83	85	822068	811458	<0.2	<0.2	2.6	2.6
						1.0	0.3	302	28.0		8.0		5.1		63.4		4.8		12.8		8		84				<0.2		2.7	
					Middle	4.3	0.4	300	27.8	27.8	7.9	7.9	7.4	7.7	60.1	60.2	4.5		11.0		10		85				<0.2		2.6	
						4.3	0.4	303	27.8		7.9		8.0		60.2		4.5		11.1		10		86				<0.2		2.6	
					Bottom	7.6	0.5	284	26.8	26.8	8.0	8.0	20.2	20.2	57.6	57.7	4.1	4.1	13.3		11		87				<0.2		2.7	
						7.6	0.5	292	26.8		8.0		20.2		57.8		4.1		13.1		11		87				<0.2		2.6	
IM12	Fine	Moderate	09:40	9.5	Surface	1.0	0.3	289	27.8	27.8	7.9	7.9	5.2	5.2	63.2	63.2	4.8	4.7	9.2	6.6	8	8	83	85	821471	812044	<0.2	<0.2	2.5	2.6
						1.0	0.3	310	27.8		7.9		5.2		63.1		4.8		9.3		8		83				<0.2		2.5	
					Middle	4.8	0.4	282	27.7	27.7	8.0	8.0	11.9	11.9	61.2	61.2	4.5		6.4		8		86				<0.2		2.6	
						4.8	0.4	287	27.7		8.0		11.9		61.1		4.5		6.4		7		85				<0.2		2.6	
					Bottom	8.5	0.3	287	26.1	26.1	8.0	8.0	24.7	24.7	55.7	55.8	3.9	3.9	4.1		7		88				<0.2		2.6	
						8.5	0.3	301	26.1		8.0		24.7		55.9		3.9		4.2		8		87				<0.2		2.6	
SR1A	Fine	Moderate	09:20	5.7	Surface	1.0	-	-	28.3	28.3	7.9	7.9	5.6	5.6	69.0	69.0	5.2	5.2	8.3	7.8	6	6	-	-	819974	812658	-	-	-	-
						1.0	-	-	28.3		7.9		5.6		69.0		5.2		8.3		7		-				-		-	
					Middle	2.9	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.9	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	-	-	28.3	28.3	8.0	8.0	7.7	7.7	67.2	67.2	5.0	5.0	7.3		5		-				-		-	
						4.7	-	-	28.3		8.0		7.7		67.1		5.0		7.2		6		-				-		-	
SR2	Fine	Moderate	09:07	4.9	Surface	1.0	0.1	343	27.8	27.8	7.9	7.9	5.6	5.6	61.4	61.4	4.7	4.7	8.9	9.7	4	5	84	86	821467	814172	<0.2	<0.2	2.6	2.5
						1.0	0.2	343	27.8		7.9		5.6		61.4		4.7		8.8		5		84				<0.2		2.5	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	293	27.8	27.8	7.9	7.9	8.1	8.1	60.6	60.6	4.6	4.6	10.6		4		87				<0.2		2.4	
						3.9	0.0	315	27.8		8.0		8.1		60.6		4.6		10.7		5		87				<0.2		2.5	
SR3	Fine	Moderate	10:21	9.7	Surface	1.0	0.3	254	27.9	28.0	7.9	7.9	3.6	3.7	62.0	62.3	4.8	4.5	9.9	9.8	8	8	-	-	822168	807567	-	-	-	-
						1.0	0.3	269	28.0		7.9		3.9		62.6		4.8		9.7		9		-				-		-	
					Middle	4.9	0.2	215	27.6	27.6	7.9	7.9	11.7	11.7	57.6	57.5	4.3		8.6		9		-				-		-	
						4.9	0.2	215	27.6		7.9		11.7		57.4		4.2		8.7		8		-				-		-	
					Bottom	8.7	0.0	103	26.7	26.7	7.9	7.9	20.6	20.6	52.3	52.4	3.7	3.7	10.9		8		-				-		-	
						8.7	0.0	107	26.7		7.9		20.6		52.4		3.7		10.7		8		-				-		-	
SR4A	Sunny	Calm	09:19	9.0	Surface	1.0	0.5	241	28.3	28.3	7.9	7.9	10.4	10.4	75.1	75.0	5.5	5.0	6.3	8.1	6	7	-	-	817183	807822	-	-	-	-
						1.0	0.6	254	28.3		7.9		10.4		74.9		5.5		6.3		7		-				-		-	
					Middle	4.5	0.4	238	27.2	27.2	7.9	7.9	14.5	14.6	62.5	62.1	4.6		8.6		7		-				-		-	
						4.5	0.4	251	27.2		7.9		14.6		61.7		4.5		8.6		6		-				-		-	
					Bottom	8.0	0.2	230	25.8	25.8	7.8	7.8	26.6	26.6	42.8	43.0	3.0	3.0	9.5		7		-				-		-	
						8.0	0.2	250	25.8		7.8		26.6		43.1		3.0		9.6		7		-				-		-	
SR5A	Sunny	Calm	09:03	5.4	Surface	1.0	0.4	304	28.0	28.0	7.7	7.7	10.8	10.8	71.0	70.9	5.2	5.2	10.8	11.7	6	6	-	-	816596	810700	-	-	-	-
						1.0	0.4	326	28.0		7.7		10.8		70.7		5.2		11.2		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	0.3	304	27.9	27.9	7.7	7.7	12.9	12.9	70.8	70.9	5.2	5.2	12.3		6		-				-		-	
						4.4	0.4	329	27.9		7.7		12.9		70.9		5.2		12.4		5		-				-		-	
SR6A	Sunny	Calm	08:36	5.0	Surface	1.0	0.1	212	28.3	28.3	7.3	7.3	6.7	6.7	72.5	72.4	5.4	5.4	6.9	7.8	5	5	-	-	817978	814730	-	-	-	-
						1.0	0.1	220	28.3		7.3		6.7		72.3		5.4		6.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.0	72	28.0	28.0	7.3	7.3	8.7	8.9	67.2	64.8	5.0	4.9	8.9		6		-				-		-	
						4.0	0.0	74	28.0		7.3		9.1		62.4		4.7		8.8		5		-				-		-	
SR7	Fine	Moderate	08:09	15.6	Surface	1.0	0.2	79	28.3	28.3	8.0	8.0	6.8	6.8	74.2	74.2	5.6	5.3	7.6	4.8	6	7	-	-	823631	823734	-	-	-	-
						1.0	0.2	82	28.3		8.0		6.8		74.2		5.6		7.5		6		-				-		-	
					Middle	7.8	0.1	249	26.6	26.6	8.1	8.1	22.5	22.5	69.1	69.1	4.9		3.7		7		-				-		-	
						7.8	0.1	262	26.6		8.1		22.5		69.1		4.9		3.7		7		-				-		-	
					Bottom	14.6	0.3	225	24.8	24.8	8.1	8.1	31.7	31.7	57.7	57.9	4.0	4.0	3.1		7		-				-		-	
						14.6	0.3	226	24.8		8.1		31.7		58.0		4.0		3.1		6		-				-		-	
SR8	Fine	Calm	09:32	5.3	Surface	1.0	-	-	27.9	27.9	7.9	7.9	5.4	5.4	64.4	64.5	4.9	4.9	9.4	9.5	8	8	-	-	820400	811622	-	-	-	-
						1.0	-	-	27.9		7.9		5.4		64.6		4.9		9.4		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	27.7	27.7	7.9	7.9	7.2	7.2	61.8	61.9	4.7	4.7	9.6		9		-				-		-	
						4.3	-	-	27.7		7.9		7.2		61.9		4.7		9.6		9		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 13 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	07:37	8.3	Surface	1.0	0.7	154	28.1	28.2	8.1	8.1	7.4	7.4	69.3	69.1	5.2	4.3	6.6	8.7	5	5	86	88	815609	804267	<0.2	<0.2	2.0	2.0
						1.0	0.7	154	28.2		8.1		7.5		68.9		5.2		6.6		5		85				<0.2		2.0	
					Middle	4.2	0.6	198	25.3	25.3	8.0	8.0	26.0	26.0	47.0	46.9	3.3		8.7		6		88				<0.2		1.9	
						4.2	0.6	211	25.2		8.0		26.0		46.8		3.3		8.8		5		87				<0.2		1.9	
					Bottom	7.3	0.5	217	24.9	24.9	8.0	8.0	30.9	30.9	43.4	43.5	3.0	3.0	10.6		6		90				<0.2		2.0	
						7.3	0.5	224	24.9		8.0		30.9		43.5		3.0		10.8		5		90				<0.2		1.9	
C2	Cloudy	Moderate	08:14	11.6	Surface	1.0	0.8	181	28.0	28.0	7.8	7.8	8.1	8.1	69.7	69.8	5.2	4.6	8.9	6.6	8	8	84	87	825694	806926	<0.2	<0.2	2.3	2.3
						1.0	0.8	192	28.0		7.8		8.1		69.9		5.2		7.8		7		84				<0.2		2.3	
					Middle	5.8	0.6	178	26.3	26.3	7.9	7.9	22.1	22.1	55.0	55.1	3.9		5.3		8		87				<0.2		2.3	
						5.8	0.7	187	26.3		7.9		22.1		55.1		3.9		5.4		7		88				<0.2		2.3	
					Bottom	10.6	0.4	158	25.3	25.3	7.8	7.8	28.9	28.9	52.1	52.2	3.6	3.7	6.1		8		89				<0.2		2.4	
						10.6	0.4	163	25.3		7.8		28.9		52.3		3.7		6.1		7		89				<0.2		2.3	
C3	Cloudy	Moderate	06:19	12.2	Surface	1.0	0.3	280	28.3	28.3	8.0	8.0	7.8	7.8	74.2	74.1	5.5	5.3	6.6	6.9	4	4	84	86	822090	817816	<0.2	<0.2	2.0	2.1
						1.0	0.3	294	28.3		8.0		7.8		73.9		5.5		6.5		4		84				<0.2		2.0	
					Middle	6.1	0.3	307	26.8	26.8	8.0	8.0	23.0	22.8	70.8	70.7	5.0		4.0		4		85				<0.2		2.1	
						6.1	0.4	335	26.8		8.0		22.5		70.6		5.0		4.0		4		86				<0.2		2.2	
					Bottom	11.2	0.3	133	24.8	24.8	7.9	7.9	31.5	31.5	57.7	57.9	4.0	4.0	10.1		4		88				<0.2		2.0	
						11.2	0.3	141	24.8		7.9		31.5		58.0		4.0		10.2		4		89				<0.2		2.0	
IM1	Cloudy	Moderate	07:58	5.1	Surface	1.0	0.0	12	27.5	27.6	8.0	8.0	15.0	15.0	63.6	63.6	4.6	4.6	8.2	10.3	4	4	86	88	817931	807123	<0.2	<0.2	1.9	1.9
						1.0	0.0	12	27.6		8.0		15.0		63.6		4.6		8.6		4		87				<0.2		2.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.1	209	25.8	25.9	7.8	7.8	26.1	26.0	47.5	48.3	3.3	3.4	12.2		5		89				<0.2		1.9	
						4.1	0.1	214	25.9		7.8		26.0		49.1		3.5		12.0		4		90				<0.2		1.9	
IM2	Cloudy	Moderate	08:06	7.3	Surface	1.0	0.0	181	26.9	26.9	8.0	8.0	16.0	16.1	48.5	48.1	3.5	**3.2**	9.1	9.4	5	6	86	88	818182	806143	<0.2	<0.2	2.0	2.0
						1.0	0.0	196	26.9		8.0		16.3		47.7		3.5		9.3		6		86				<0.2		2.0	
					Middle	3.7	0.2	172	25.4	25.4	8.0	8.0	26.2	26.2	40.7	40.7	2.9		10.0		6		88				<0.2		2.0	
						3.7	0.2	183	25.3		8.0		26.3		40.6		2.9		10.7		5		87				<0.2		1.9	
					Bottom	6.3	0.1	149	25.2	25.2	8.0	8.0	29.3	29.3	41.8	42.0	2.9	2.9	8.5		5		90				<0.2		2.2	
						6.3	0.2	158	25.2		8.0		29.3		42.1		2.9		8.8		6		89				<0.2		2.0	
IM3	Cloudy	Moderate	08:13	7.3	Surface	1.0	0.2	176	26.1	26.1	8.0	8.0	18.2	18.2	50.0	49.9	3.7	**3.4**	5.4	5.5	6	6	86	88	818760	805578	<0.2	<0.2	2.0	2.0
						1.0	0.2	176	26.0		8.0		18.2		49.8		3.6		5.3		6		85				<0.2		2.0	
					Middle	3.7	0.3	162	25.5	25.5	8.0	8.0	24.1	24.2	44.3	44.4	3.2		5.3		6		87				<0.2		2.0	
						3.7	0.3	176	25.4		8.0		24.2		44.4		3.2		5.5		6		89				<0.2		2.2	
					Bottom	6.3	0.2	101	25.1	25.1	8.0	8.0	29.8	29.8	46.3	46.7	3.2	3.3	5.8		7		90				<0.2		2.0	
						6.3	0.2	110	25.1		8.0		29.8		47.0		3.3		5.9		6		91				<0.2		2.0	
IM4	Cloudy	Moderate	08:23	8.2	Surface	1.0	1.1	201	27.6	27.6	7.9	7.9	10.9	10.9	58.3	58.1	4.3	**3.6**	7.3	8.9	5	5	86	88	819718	804600	<0.2	<0.2	1.9	2.0
						1.0	1.2	203	27.6		7.9		10.9		57.8		4.3		7.6		6		87				<0.2		1.9	
					Middle	4.1	0.7	183	25.5	25.5	8.0	8.0	27.4	27.4	42.0	41.9	3.0		9.5		6		88				<0.2		2.0	
						4.1	0.7	201	25.4		8.0		27.4		41.8		2.9		9.4		5		89				<0.2		2.0	
					Bottom	7.2	0.5	166	24.9	24.9	8.0	8.0	30.9	30.8	42.1	42.3	2.9	3.0	9.6		5		90				<0.2		2.0	
						7.2	0.5	167	24.9		8.0		30.8		42.4		3.0		9.7		4		90				<0.2		2.0	
IM5	Cloudy	Moderate	08:31	7.4	Surface	1.0	0.9	217	28.0	28.0	7.9	7.9	7.4	7.4	66.2	66.0	5.0	**3.9**	7.4	9.3	6	5	86	88	820735	804890	<0.2	<0.2	1.9	2.0
						1.0	0.9	223	28.0		8.0		7.4		65.7		4.9		7.3		5		86				<0.2		2.0	
					Middle	3.7	0.6	205	25.8	25.8	8.0	8.0	24.2	24.2	40.3	40.2	2.9		5.4		5		87				<0.2		1.9	
						3.7	0.6	215	25.8		8.0		24.1		40.0		2.9		5.5		5		87				<0.2		1.9	
					Bottom	6.4	0.5	210	25.1	25.1	8.0	8.0	29.9	29.9	40.2	40.5	2.8	2.8	15.0		5		90				<0.2		2.0	
						6.4	0.6	210	25.1		8.0		29.9		40.7		2.8		15.2		5		90				<0.2		2.0	
IM6	Cloudy	Moderate	08:39	7.4	Surface	1.0	0.5	227	27.7	27.7	7.8	7.8	10.3	9.9	58.4	58.3	4.3	**3.8**	7.9	8.5	5	6	85	88	821074	805845	<0.2	<0.2	2.0	2.1
						1.0	0.5	246	27.6		7.8		9.6		58.2		4.4		7.7		5		86				<0.2		2.0	
					Middle	3.7	0.6	247	26.7	26.7	8.0	8.0	18.8	18.8	45.5	45.2	3.3		8.3		6		87				<0.2		2.1	
						3.7	0.6	259	26.7		8.0		18.8		44.9		3.2		8.9		6		88				<0.2		2.2	
					Bottom	6.4	0.4	214	25.3	25.3	8.0	8.0	28.2	28.3	41.2	43.1	2.9	3.0	9.4		6		90				<0.2		2.0	
						6.4	0.5	226	25.3		8.0		28.3		44.9		3.1		8.9		7		90				<0.2		2.1	
IM7	Cloudy	Moderate	08:48	8.3	Surface	1.0	0.2	236	28.0	28.0	7.9	7.9	7.6	7.6	63.0	62.6	4.7	4.1	7.2	7.9	6	6	86	88	821340	806843	<0.2	<0.2	2.1	2.2
						1.0	0.2	239	28.0		7.9		7.6		62.2		4.7		6.9		6		88				<0.2		2.1	
					Middle	4.2	0.4	253	26.3	26.3	7.9	7.9	20.5	20.5	48.0	48.0	3.5		6.7		6		89				<0.2		2.3	
						4.2	0.4	256	26.3		7.9		20.6		47.9		3.5		7.0		6		88				<0.2		2.5	
					Bottom	7.3	0.3	224	25.6	25.6	7.9	7.9	26.8	26.9	44.4	44.8	3.1	3.2	9.8		6		90				<0.2		2.2	
						7.3	0.3	239	25.6		7.9		27.0		45.1		3.2		9.8		6		89				<0.2		2.2	
IM8	Cloudy	Moderate	07:46	8.0	Surface	1.0	0.2	191	27.8	27.8	7.8	7.8	6.7	6.7	60.1	60.1	4.7	4.3	11.0	9.7	8	7	84	87	821846	808123	<0.2	<0.2	2.2	2.3
						1.0	0.2	196	27.7		7.8		6.7		60.0		4.6		9.9		6		84				<0.2		2.2	
					Middle	4.0	0.1	159	26.7	26.7	7.8	7.8	18.5	18.5	53.2	53.3	3.9		6.5		7		87				<0.2		2.4	
						4.0	0.1	170	26.6		7.8		18.4		53.4		3.9		7.0		6		87				<0.2		2.5	
					Bottom	7.0	0.1	261	26.1	26.1	7.8	7.8	23.3	23.3	50.1	50.3	3.6	3.6	12.0		7		90				<0.2		2.4	
						7.0	0.1	271	26.1		7.8		23.3		50.5		3.6		11.9		7		90				<0.2		2.3	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 13 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	07:40	7.6	Surface	1.0	0.4	147	27.6	27.6	7.7	7.7	8.0	7.9	71.1	71.5	5.4	4.8	8.5	10.2	6	7	83	86	822077	808828	<0.2	<0.2	2.4	2.4
						1.0	0.5	148	27.6		7.7		7.8		71.9		5.4		8.2		7		83				<0.2		2.4	
					Middle	3.8	0.4	137	26.7	26.7	7.8	7.8	15.9	15.8	57.8	57.9	4.2		8.2		7		86				<0.2		2.3	
						3.8	0.4	144	26.7		7.8		15.7		57.9		4.3		8.5		7		87				<0.2		2.3	
					Bottom	6.6	0.4	93	27.0	27.0	7.7	7.7	21.5	21.5	54.6	54.9	3.9	3.9	13.9		7		88				<0.2		2.4	
						6.6	0.4	98	27.0		7.7		21.5		55.1		3.9		14.0		6		89				<0.2		2.4	
IM10	Cloudy	Moderate	07:33	8.0	Surface	1.0	0.7	120	27.8	27.8	7.8	7.8	8.3	8.3	73.7	74.8	5.5	4.9	9.3	7.9	6	5	83	85	822387	809779	<0.2	<0.2	2.3	2.3
						1.0	0.7	131	27.8		7.8		8.2		75.9		5.7		8.6		6		83				<0.2		2.3	
					Middle	4.0	0.6	106	27.3	27.3	7.8	7.8	14.7	14.7	57.4	57.5	4.2		6.7		5		86				<0.2		2.3	
						4.0	0.6	106	27.3		7.8		14.7		57.5		4.2		6.7		5		86				<0.2		2.2	
					Bottom	7.0	0.5	98	27.0	27.1	7.7	7.7	23.0	23.0	55.9	56.2	3.9	4.0	7.9		5		87				<0.2		2.3	
						7.0	0.5	105	27.1		7.7		23.0		56.5		4.0		8.0		5		87				<0.2		2.3	
IM11	Cloudy	Moderate	07:21	7.4	Surface	1.0	0.9	112	27.8	27.8	7.7	7.7	10.2	10.2	68.7	69.6	5.1	4.9	9.6	7.2	6	6	82	85	822052	811446	<0.2	<0.2	2.4	2.4
						1.0	1.0	118	27.8		7.7		10.2		70.5		5.2		9.5		5		83				<0.2		2.2	
					Middle	3.7	0.7	93	27.6	27.6	7.8	7.8	13.4	13.4	62.4	62.4	4.6		7.2		6		86				<0.2		2.4	
						3.7	0.8	101	27.6		7.8		13.4		62.4		4.6		7.3		5		86				<0.2		2.3	
					Bottom	6.4	0.2	89	26.1	26.1	7.8	7.8	23.7	23.7	57.4	57.5	4.1	4.1	4.7		6		87				<0.2		2.5	
						6.4	0.2	97	26.1		7.8		23.8		57.5		4.1		4.8		6		87				<0.2		2.3	
IM12	Fine	Moderate	07:15	9.5	Surface	1.0	0.7	101	28.0	28.0	7.8	7.8	9.2	9.2	68.0	68.1	5.1	4.7	7.8	6.3	7	7	84	86	821449	812050	<0.2	<0.2	2.4	2.4
						1.0	0.8	106	28.0		7.8		9.2		68.2		5.1		7.6		6		84				<0.2		2.3	
					Middle	4.8	0.7	99	27.2	27.2	7.9	7.9	16.7	16.7	59.4	59.4	4.3		5.0		7		85				<0.2		2.2	
						4.8	0.7	101	27.2		7.9		16.7		59.4		4.3		5.0		6		85				<0.2		2.2	
					Bottom	8.5	0.2	118	25.1	25.1	7.8	7.8	29.9	29.8	55.7	56.1	3.9	3.9	6.2		7		87				<0.2		2.6	
						8.5	0.2	128	25.1		7.8		29.8		56.4		3.9		6.0		6		88				<0.2		2.5	
SR1A	Fine	Calm	06:55	4.5	Surface	1.0	-	-	28.3	28.3	7.9	7.9	6.7	6.7	75.5	75.4	5.7	5.7	6.7	6.2	4	4	-	-	819982	812655	-	-	-	-
						1.0	-	-	28.2		7.9		6.7		75.3		5.7		6.5		4		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	28.0	28.1	7.8	7.8	13.0	12.8	67.1	67.1	4.9	4.9	5.8		4		-				-		-	
						3.5	-	-	28.1		7.8		12.6		67.1		4.9		5.8		5		-				-		-	
SR2	Cloudy	Moderate	06:43	4.3	Surface	1.0	0.4	88	28.3	28.3	7.9	7.9	7.6	7.6	75.6	75.7	5.6	5.7	8.2	8.6	4	4	86	87	821441	814172	<0.2	<0.2	2.3	2.3
						1.0	0.4	89	28.2		7.9		7.7		75.7		5.7		8.2		4		87				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.3	83	27.9	27.9	7.9	7.9	7.9	7.9	77.7	78.0	5.8	5.9	8.8		4		87				<0.2		2.2	
						3.3	0.3	86	27.9		7.9		7.8		78.2		5.9		9.3		4		88				<0.2		2.4	
SR3	Cloudy	Moderate	07:52	9.1	Surface	1.0	0.3	205	27.4	27.4	7.8	7.8	9.9	9.9	65.3	65.2	4.9	4.3	7.7	10.8	6	6	-	-	822128	807554	-	-	-	-
						1.0	0.4	211	27.4		7.8		9.9		65.0		4.9		7.8		6		-				-		-	
					Middle	4.6	0.2	173	26.2	26.2	7.8	7.8	22.0	21.9	51.3	51.5	3.7		10.3		7		-				-		-	
						4.6	0.3	175	26.2		7.8		21.9		51.6		3.7		10.5		6		-				-		-	
					Bottom	8.1	0.1	226	26.1	26.1	7.7	7.7	23.6	23.6	53.7	53.9	3.8	3.8	14.3		6		-				-		-	
						8.1	0.1	226	26.1		7.7		23.6		54.0		3.8		14.4		6		-				-		-	
SR4A	Cloudy	Moderate	07:15	8.7	Surface	1.0	0.7	236	28.0	28.0	7.9	7.9	9.7	9.7	67.4	67.3	5.0	**4.0**	5.8	7.7	5	6	-	-	817188	807818	-	-	-	-
						1.0	0.7	250	28.0		7.9		9.7		67.2		5.0		5.8		6		-				-		-	
					Middle	4.4	0.1	358	25.6	25.6	7.9	7.9	26.5	26.5	41.4	41.5	2.9		8.1		6		-				-		-	
						4.4	0.1	329	25.6		7.9		26.5		41.6		2.9		8.4		5		-				-		-	
					Bottom	7.7	0.0	201	25.4	25.4	7.9	7.9	28.0	28.0	45.1	45.3	3.2	3.2	8.8		7		-				-		-	
						7.7	0.0	209	25.4		7.9		28.0		45.5		3.2		9.0		7		-				-		-	
SR5A	Cloudy	Moderate	06:55	3.7	Surface	1.0	0.1	266	28.6	28.6	7.9	7.9	10.2	10.2	75.9	75.8	5.6	5.6	10.6	10.9	4	5	-	-	816569	810703	-	-	-	-
						1.0	0.1	283	28.6		7.9		10.2		75.6		5.5		10.6		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	316	28.5	28.5	7.9	7.9	12.4	12.4	75.3	75.4	5.5	5.5	10.5		4		-				-		-	
						2.7	0.1	334	28.5		7.9		12.4		75.4		5.5		11.8		5		-				-		-	
SR6A	Cloudy	Moderate	06:27	4.7	Surface	1.0	0.1	7	28.3	28.3	8.0	8.0	9.5	9.5	66.2	66.2	4.9	4.9	5.5	6.4	4	4	-	-	817961	814728	-	-	-	-
						1.0	0.1	7	28.2		8.0		9.5		66.1		4.9		5.7		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	346	27.8	27.8	7.9	7.9	13.4	13.4	58.7	58.8	4.3	4.3	7.1		4		-				-		-	
						3.7	0.1	318	27.8		7.9		13.4		58.9		4.3		7.4		4		-				-		-	
SR7	Cloudy	Moderate	05:49	15.8	Surface	1.0	0.4	85	27.5	27.5	8.1	8.1	13.2	13.2	67.9	68.0	5.0	**4.6**	5.0	4.1	4	3	-	-	823656	823720	-	-	-	-
						1.0	0.4	86	27.5		8.1		13.2		68.0		5.0		4.8		2		-				-		-	
					Middle	7.9	0.3	80	25.8	25.8	8.0	8.0	26.4	26.4	59.8	59.8	4.2		3.6		4		-				-		-	
						7.9	0.3	87	25.8		8.0		26.4		59.8		4.2		3.6		3		-				-		-	
					Bottom	14.8	0.1	145	24.9	24.9	7.8	7.8	31.6	31.6	54.8	55.0	3.8	3.8	3.9		4		-				-		-	
						14.8	0.1	153	24.9		7.8		31.6		55.1		3.8		3.8		3		-				-		-	
SR8	Fine	Moderate	07:06	5.4	Surface	1.0	-	-	28.3	28.3	7.8	7.8	8.3	8.3	72.4	72.4	5.4	5.4	7.1	7.6	4	5	-	-	820408	811633	-	-	-	-
						1.0	-	-	28.2		7.8		8.3		72.3		5.4		7.1		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	27.8	27.8	7.8	7.8	14.9	14.9	63.9	64.0	4.6	4.6	8.1		5		-				-		-	
						4.4	-	-	27.8		7.8		14.9		64.0		4.6		8.2		5		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 13 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	11:26	8.6	Surface	1.0	0.4	100	28.1	28.1	7.9	7.9	8.9	8.9	67.8	67.7	5.1	4.5	6.7	7.6	6	6	86	88	815608	804236	<0.2	<0.2	2.2	2.3
						1.0	0.4	109	28.1		7.9		8.9		67.6		5.1		6.5		5		86				<0.2		2.3	
					Middle	4.3	0.3	33	26.7	26.7	8.0	8.1	14.1	14.2	51.4	51.3	3.8		5.0		6		88				<0.2		2.2	
						4.3	0.3	35	26.6		8.1		14.2		51.1		3.8		5.0		5		88				<0.2		2.3	
					Bottom	7.6	0.3	16	25.0	25.0	8.1	8.1	30.2	30.2	40.9	41.1	2.9	2.9	11.3		6		90				<0.2		2.3	
						7.6	0.3	17	25.0		8.1		30.2		41.2		2.9		11.1		6		90				<0.2		2.3	
C2	Rainy	Moderate	10:20	11.8	Surface	1.0	0.2	320	27.5	27.5	7.9	7.9	4.4	4.4	65.3	65.3	5.0	4.4	11.1	7.1	7	6	83	86	825703	806964	<0.2	<0.2	2.3	2.3
						1.0	0.2	340	27.5		7.9		4.4		65.2		5.0		11.0		6		83				<0.2		2.3	
					Middle	5.9	0.5	325	26.3	26.3	7.9	7.9	22.3	22.3	53.0	53.0	3.8		5.2		7		86				<0.2		2.2	
						5.9	0.5	325	26.3		7.9		22.3		52.9		3.8		5.3		6		86				<0.2		2.3	
					Bottom	10.8	0.3	354	25.3	25.3	7.9	7.9	29.2	29.2	48.6	48.7	3.4	3.4	5.1		6		88				<0.2		2.2	
						10.8	0.3	326	25.3		7.9		29.2		48.7		3.4		5.1		6		88				<0.2		2.2	
C3	Cloudy	Moderate	12:17	12.7	Surface	1.0	0.3	282	28.3	28.3	7.9	7.9	10.0	10.0	73.8	73.9	5.4	4.5	5.6	5.5	3	3	84	87	822110	817815	<0.2	<0.2	2.1	2.0
						1.0	0.3	288	28.3		7.9		10.0		74.0		5.5		5.6		3		84				<0.2		1.9	
					Middle	6.4	0.2	246	25.2	25.2	8.0	8.0	28.9	28.9	51.3	51.4	3.6		3.3		4		85				<0.2		1.9	
						6.4	0.2	250	25.2		8.0		28.9		51.4		3.6		3.3		3		86				<0.2		2.1	
					Bottom	11.7	0.3	264	24.4	24.4	8.0	7.9	32.7	32.7	50.7	50.8	3.5	3.5	7.8		4		90				<0.2		2.1	
						11.7	0.4	281	24.4		7.9		32.7		50.8		3.5		7.7		3		90				<0.2		2.1	
IM1	Cloudy	Moderate	11:06	5.1	Surface	1.0	0.1	325	28.6	28.6	8.4	8.3	9.0	9.0	87.3	85.0	6.4	6.3	4.8	4.8	6	6	88	89	817972	807151	<0.2	<0.2	2.3	2.3
						1.0	0.1	355	28.6		8.3		9.0		82.6		6.1		4.8		5		87				<0.2		2.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.2	265	26.1	26.2	8.0	8.0	24.2	24.1	55.8	58.4	3.9	4.1	4.9		6		90				<0.2		2.2	
						4.1	0.2	288	26.2		8.0		24.1		61.0		4.3		4.9		6		90				<0.2		2.2	
IM2	Cloudy	Moderate	10:57	7.4	Surface	1.0	0.9	7	27.2	27.2	8.0	8.0	14.1	14.0	56.1	56.2	4.1	**3.5**	5.7	8.1	6	7	86	88	818167	806167	<0.2	<0.2	2.3	2.3
						1.0	1.0	7	27.2		8.0		13.9		56.2		4.1		5.6		7		86				<0.2		2.3	
					Middle	3.7	0.7	14	25.7	25.7	8.1	8.1	26.0	26.1	40.1	40.0	2.8		5.2		7		87				<0.2		2.4	
						3.7	0.7	14	25.7		8.1		26.1		39.9		2.8		5.7		6		88				<0.2		2.3	
					Bottom	6.4	0.3	351	25.0	25.0	8.1	8.1	29.9	29.8	40.3	40.6	2.8	2.8	12.8		6		89				<0.2		2.2	
						6.4	0.3	323	25.0		8.1		29.8		40.8		2.8		13.7		7		90				<0.2		2.3	
IM3	Cloudy	Moderate	10:49	7.2	Surface	1.0	0.7	315	27.1	27.1	8.0	8.0	15.5	15.5	57.1	57.2	4.2	**3.7**	5.9	7.3	7	7	86	88	818780	805595	<0.2	<0.2	2.2	2.2
						1.0	0.8	322	27.1		8.0		15.5		57.3		4.2		5.9		7		86				<0.2		2.2	
					Middle	3.6	0.5	325	25.9	25.9	8.1	8.1	24.1	24.2	43.6	43.6	3.1		4.2		7		87				<0.2		2.2	
						3.6	0.6	338	25.8		8.1		24.3		43.5		3.1		4.2		6		88				<0.2		2.2	
					Bottom	6.2	0.4	308	25.0	25.0	8.1	8.1	30.0	30.0	43.4	43.6	3.0	3.1	11.5		7		90				<0.2		2.2	
						6.2	0.4	312	25.0		8.1		30.0		43.7		3.1		12.0		7		90				<0.2		2.3	
IM4	Rainy	Moderate	10:40	7.6	Surface	1.0	0.8	303	28.1	28.1	8.0	8.0	8.5	8.5	68.6	68.5	5.1	4.2	7.6	10.7	6	7	86	88	819718	804617	<0.2	<0.2	2.2	2.2
						1.0	0.9	323	28.1		8.0		8.5		68.4		5.1		8.1		7		85				<0.2		2.1	
					Middle	3.8	0.7	323	25.6	25.6	8.0	8.0	23.8	23.8	44.5	44.4	3.2		12.5		6		88				<0.2		2.2	
						3.8	0.8	331	25.5		8.0		23.9		44.3		3.2		12.4		7		89				<0.2		2.2	
					Bottom	6.6	0.6	323	25.1	25.1	8.0	8.0	29.7	29.7	45.1	45.7	3.1	3.2	11.8		7		90				<0.2		2.2	
						6.6	0.6	326	25.1		8.0		29.7		46.2		3.2		12.0		6		90				<0.2		2.1	
IM5	Rainy	Moderate	10:34	7.4	Surface	1.0	0.5	350	27.9	27.9	8.0	8.0	6.8	6.6	68.3	67.1	5.2	4.4	7.5	8.4	7	7	87	88	820715	804877	<0.2	<0.2	2.0	2.1
						1.0	0.6	354	27.8		8.0		6.5		65.9		5.0		7.4		7		86				<0.2		2.1	
					Middle	3.7	0.6	16	27.2	27.2	8.1	8.1	14.8	14.8	51.2	51.2	3.7		7.3		7		88				<0.2		2.0	
						3.7	0.6	16	27.2		8.1		14.8		51.2		3.7		7.3		7		89				<0.2		2.2	
					Bottom	6.4	0.5	34	25.1	25.1	8.0	8.0	29.9	29.9	46.3	46.9	3.2	3.3	10.5		8		90				<0.2		2.1	
						6.4	0.5	35	25.1		8.0		29.9		47.5		3.3		10.2		8		90				<0.2		2.1	
IM6	Rainy	Moderate	10:27	7.3	Surface	1.0	0.2	271	28.1	28.1	8.0	8.0	6.2	6.2	71.9	71.8	5.4	5.1	8.3	7.6	7	7	86	89	821058	805812	<0.2	<0.2	2.0	2.1
						1.0	0.3	293	28.1		8.0		6.2		71.7		5.4		8.3		7		87				<0.2		2.0	
					Middle	3.7	0.0	310	27.5	27.5	8.0	8.0	8.8	8.9	63.9	63.6	4.8		7.9		8		88				<0.2		2.1	
						3.7	0.0	318	27.5		8.0		8.9		63.2		4.8		7.8		7		89				<0.2		2.1	
					Bottom	6.3	0.1	112	25.5	25.5	8.0	8.0	27.1	27.2	45.7	46.1	3.2	3.3	6.5		7		90				<0.2		2.2	
						6.3	0.1	116	25.5		8.0		27.3		46.4		3.3		6.6		8		91				<0.2		2.0	
IM7	Rainy	Moderate	10:20	7.8	Surface	1.0	0.3	275	28.1	28.1	8.0	8.0	7.1	7.1	67.9	67.8	5.1	4.3	8.4	7.7	7	8	85	88	821356	806856	<0.2	<0.2	2.0	2.0
						1.0	0.3	291	28.1		8.0		7.2		67.6		5.1		8.1		8		87				<0.2		2.1	
					Middle	3.9	0.4	267	26.6	26.6	8.0	8.0	20.2	20.1	48.5	48.5	3.5		6.9		8		88				<0.2		2.1	
						3.9	0.4	293	26.6		8.0		20.1		48.5		3.5		7.1		8		89				<0.2		2.0	
					Bottom	6.8	0.1	87	25.6	25.6	8.0	8.0	26.6	26.7	44.5	44.7	3.1	3.2	7.9		8		90				<0.2		2.0	
						6.8	0.1	95	25.6		8.0		26.7		44.9		3.2		7.9		9		89				<0.2		2.0	
IM8	Rainy	Moderate	10:49	8.0	Surface	1.0	0.3	243	28.0	28.0	7.8	7.8	7.4	7.4	69.9	69.9	5.3	4.8	9.2	9.0	7	7	82	85	821819	808125	<0.2	<0.2	2.4	2.3
						1.0	0.3	263	28.0		7.8		7.4		69.8		5.2		9.2		7		82				<0.2		2.3	
					Middle	4.0	0.1	301	27.2	27.2	7.8	7.8	15.2	15.2	58.3	58.3	4.3		6.6		7		85				<0.2		2.3	
						4.0	0.1	319	27.1		7.8		15.2		58.2		4.3		6.8		8		85				<0.2		2.3	
					Bottom	7.0	0.2	92	25.8	25.8	7.7	7.7	25.4	25.4	46.7	48.7	3.3	3.5	11.1		7		88				<0.2		2.4	
						7.0	0.2	93	25.8		7.7		25.4		50.6		3.6		11.3		8		89				<0.2		2.3	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 13 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Rainy	Moderate	10:56	7.3	Surface	1.0	0.2	265	28.2	28.2	7.8	7.8	6.4	6.5	73.5	73.5	5.5	5.0	10.0	10.3	9	8	82	86	822070	808808	<0.2	<0.2	2.4	2.4
						1.0	0.2	271	28.2		7.8		6.5		73.4		5.5		10.0		8		82				<0.2		2.4	
					Middle	3.7	0.3	278	27.1	27.1	7.8	7.8	15.8	15.8	60.2	60.3	4.4		8.8		7		85				<0.2		2.3	
						3.7	0.3	283	27.1		7.8		15.8		60.4		4.4		8.9		8		86				<0.2		2.5	
					Bottom	6.3	0.3	267	26.1	26.1	7.8	7.8	23.5	23.5	54.9	55.1	3.9	3.9	12.0		8		90				<0.2		2.5	
						6.3	0.3	273	26.1		7.8		23.6		55.2		3.9		12.2		7		90				<0.2		2.4	
IM10	Rainy	Moderate	11:04	7.2	Surface	1.0	0.4	284	28.2	28.2	7.8	7.8	7.0	7.0	73.6	73.7	5.5	4.7	10.4	8.7	9	9	83	86	822380	809801	<0.2	<0.2	2.5	2.4
						1.0	0.4	292	28.2		7.8		7.0		73.7		5.5		10.4		9		83				<0.2		2.4	
					Middle	3.6	0.6	297	26.5	26.5	7.8	7.8	20.9	20.9	53.0	53.1	3.8		7.4		9		85				<0.2		2.4	
						3.6	0.6	316	26.5		7.8		20.9		53.1		3.8		7.5		8		85				<0.2		2.4	
					Bottom	6.2	0.4	290	25.7	25.7	7.8	7.8	26.5	26.5	54.1	54.3	3.8	3.8	8.3		8		90				<0.2		2.4	
						6.2	0.4	316	25.7		7.8		26.5		54.4		3.8		8.4		8		91				<0.2		2.5	
IM11	Cloudy	Moderate	11:15	7.4	Surface	1.0	0.3	284	28.3	28.3	7.7	7.7	7.7	7.7	73.2	73.3	5.5	4.8	9.3	7.3	7	7	83	86	822074	811481	<0.2	<0.2	2.4	2.4
						1.0	0.3	302	28.3		7.7		7.7		73.4		5.5		9.3		7		82				<0.2		2.4	
					Middle	3.7	0.4	300	26.5	26.5	7.8	7.8	19.4	19.0	55.8	56.0	4.0		6.3		8		85				<0.2		2.3	
						3.7	0.4	303	26.5		7.8		18.6		56.2		4.1		6.3		6		86				<0.2		2.4	
					Bottom	6.4	0.5	284	25.9	25.9	7.7	7.7	25.0	24.9	56.8	57.1	4.0	4.1	6.2		8		91				<0.2		2.4	
						6.4	0.5	292	25.9		7.7		24.8		57.3		4.1		6.2		7		91				<0.2		2.4	
IM12	Cloudy	Moderate	11:21	9.8	Surface	1.0	0.3	289	28.1	28.1	7.8	7.8	7.6	7.6	70.1	70.2	5.3	4.5	8.0	8.1	6	6	84	86	821473	812048	<0.2	<0.2	2.4	2.4
						1.0	0.3	310	28.1		7.8		7.6		70.3		5.3		8.0		6		84				<0.2		2.3	
					Middle	4.9	0.4	282	26.5	26.5	7.8	7.8	20.5	20.5	51.2	51.1	3.7		7.1		6		85				<0.2		2.4	
						4.9	0.4	287	26.5		7.8		20.5		51.0		3.7		7.3		6		86				<0.2		2.3	
					Bottom	8.8	0.3	287	25.1	25.1	7.8	7.8	30.0	30.0	50.6	50.7	3.5	3.5	8.8		6		89				<0.2		2.4	
						8.8	0.3	301	25.1		7.8		30.0		50.7		3.5		9.2		6		90				<0.2		2.4	
SR1A	Cloudy	Calm	11:40	4.6	Surface	1.0	-	-	28.7	28.7	7.9	7.9	8.2	8.1	84.3	84.3	6.2	6.2	5.6	5.5	4	4	-	-	819981	812661	-	-	-	-
						1.0	-	-	28.6		7.9		8.1		84.2		6.2		5.6		4		-				-		-	
					Middle	2.3	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.3	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	28.0	28.0	7.8	7.8	13.7	13.8	66.5	66.5	4.8	4.8	5.3		4		-				-		-	
						3.6	-	-	28.0		7.8		13.8		66.5		4.8		5.3		5		-				-		-	
SR2	Cloudy	Moderate	11:54	4.9	Surface	1.0	0.1	343	28.6	28.6	7.8	7.8	9.6	9.6	80.4	80.5	5.9	5.9	6.6	7.4	6	6	83	84	821458	814187	<0.2	<0.2	2.3	2.4
						1.0	0.2	343	28.6		7.8		9.6		80.6		5.9		6.6		6		83				<0.2		2.4	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.0	293	27.6	27.7	7.8	7.8	15.8	15.8	64.0	64.1	4.6	4.6	8.2		5		85				<0.2		2.3	
						3.9	0.0	315	27.7		7.8		15.8		64.2		4.6		8.2		6		86				<0.2		2.4	
SR3	Rainy	Moderate	10:38	9.4	Surface	1.0	0.3	254	28.0	28.0	7.7	7.7	5.9	5.9	69.4	69.4	5.3	4.4	9.9	9.8	8	7	-	-	822138	807560	-	-	-	-
						1.0	0.3	269	28.0		7.7		5.9		69.4		5.3		9.9		8		-				-		-	
					Middle	4.7	0.2	215	26.7	26.8	7.7	7.7	21.1	20.9	49.8	50.3	3.5		6.5		8		-				-		-	
						4.7	0.2	215	26.8		7.7		20.6		50.8		3.6		6.5		7		-				-		-	
					Bottom	8.4	0.0	103	25.6	25.6	7.7	7.7	26.5	26.5	43.4	43.6	3.1	3.1	13.3		7		-				-		-	
						8.4	0.0	107	25.6		7.7		26.5		43.7		3.1		12.7		6		-				-		-	
SR4A	Cloudy	Moderate	11:46	8.8	Surface	1.0	0.5	241	28.8	28.8	8.3	8.3	10.5	10.5	83.9	83.7	6.1	4.5	5.4	6.7	5	5	-	-	817165	807818	-	-	-	-
						1.0	0.6	254	28.8		8.3		10.5		83.5		6.1		5.5		6		-				-		-	
					Middle	4.4	0.4	238	25.7	25.7	8.0	8.0	25.6	25.6	41.3	41.4	2.9		6.6		6		-				-		-	
						4.4	0.4	251	25.6		8.0		25.6		41.4		2.9		6.8		5		-				-		-	
					Bottom	7.8	0.2	230	25.4	25.4	8.0	8.0	28.1	28.1	43.8	44.2	3.1	3.1	8.0		5		-				-		-	
						7.8	0.2	250	25.4		8.0		28.2		44.6		3.1		8.0		5		-				-		-	
SR5A	Cloudy	Moderate	12:04	4.0	Surface	1.0	0.4	304	28.7	28.7	8.3	8.3	10.8	10.8	87.8	87.7	6.4	6.4	5.7	6.2	5	5	-	-	816571	810709	-	-	-	-
						1.0	0.4	326	28.7		8.3		10.8		87.5		6.4		5.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.3	304	28.2	28.3	8.1	8.1	14.9	14.1	73.5	75.4	5.3	5.5	6.9		5		-				-		-	
						3.0	0.4	329	28.3		8.1		13.4		77.3		5.6		6.3		5		-				-		-	
SR6A	Cloudy	Moderate	12:40	4.2	Surface	1.0	0.1	212	28.4	28.4	8.0	8.0	10.3	10.3	68.1	67.9	5.0	5.0	9.9	9.9	6	5	-	-	817968	814727	-	-	-	-
						1.0	0.1	220	28.3		8.0		10.4		67.7		5.0		9.9		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	72	28.1	28.1	7.9	7.9	11.8	11.8	65.6	65.8	4.8	4.8	9.8		4		-				-		-	
						3.2	0.0	74	28.1		7.9		11.8		66.0		4.8		9.8		3		-				-		-	
SR7	Cloudy	Moderate	12:48	15.3	Surface	1.0	0.2	79	28.4	28.4	7.9	7.9	10.3	10.3	79.3	79.4	5.8	5.0	5.9	4.3	4	4	-	-	823652	823753	-	-	-	-
						1.0	0.2	82	28.4		7.9		10.3		79.5		5.8		5.9		3		-				-		-	
					Middle	7.7	0.1	249	25.9	26.0	8.0	8.0	26.0	25.9	59.5	59.6	4.2		3.6		4		-				-		-	
						7.7	0.1	262	26.0		8.0		25.9		59.6		4.2		3.6		4		-				-		-	
					Bottom	14.3	0.3	225	24.7	24.8	7.9	7.9	32.3	32.3	52.7	52.8	3.6	3.7	3.6		4		-				-		-	
						14.3	0.3	226	24.8		7.9		32.2		52.8		3.7		3.5		4		-				-		-	
SR8	Cloudy	Moderate	11:31	4.2	Surface	1.0	-	-	28.4	28.4	7.9	7.9	7.2	7.2	74.1	74.0	5.5	5.5	8.4	8.5	7	7	-	-	820389	811625	-	-	-	-
						1.0	-	-	28.3		7.9		7.2		73.9		5.5		8.4		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	-	-	27.6	27.6	7.8	7.8	15.6	15.2	61.0	61.4	4.4	4.5	8.7		7		-				-		-	
						3.2	-	-	27.6		7.8		14.8		61.7		4.5		8.6		6		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 16 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Rainy	Moderate	10:05	8.6	Surface	1.0	0.4	178	27.8	27.8	7.9	7.9	6.5	6.5	86.8	86.2	6.6	5.3	6.4	5.8	5	6	85	89	815597	804249	<0.2	<0.2	1.5	1.6
						1.0	0.5	190	27.7		7.9		6.5		85.5		6.5		6.2		6		85				<0.2		1.7	
					Middle	4.3	0.2	232	26.3	26.3	7.8	7.8	19.9	19.9	55.4	55.2	4.0		4.9		6		88				<0.2		1.6	
						4.3	0.3	236	26.2		7.8		19.9		55.0		4.0		4.9		6		89				<0.2		1.6	
					Bottom	7.6	0.4	215	25.3	25.3	7.8	7.8	29.3	29.3	45.0	45.1	3.1	3.1	6.2		5		92				<0.2		1.6	
						7.6	0.5	227	25.3		7.8		29.3		45.1		3.1		6.3		5		92				<0.2		1.6	
C2	Cloudy	Moderate	11:20	11.0	Surface	1.0	1.0	166	27.0	27.0	7.9	7.9	8.6	8.6	70.4	70.5	5.4	4.6	8.0	7.1	6	7	85	87	825704	806933	<0.2	<0.2	1.6	1.6
						1.0	1.0	168	27.0		7.9		8.6		70.6		5.4		7.9		6		85				<0.2		1.6	
					Middle	5.5	0.5	153	26.0	26.0	7.9	7.9	21.2	21.2	52.9	52.8	3.8		4.3		7		87				<0.2		1.6	
						5.5	0.5	165	26.0		7.9		21.2		52.6		3.8		4.5		7		88				<0.2		1.6	
					Bottom	10.0	0.3	151	25.8	25.9	7.8	7.8	27.1	27.1	46.6	46.6	3.3	3.3	8.7		7		89				<0.2		1.7	
						10.0	0.3	165	25.9		7.8		27.1		46.6		3.3		9.1		6		90				<0.2		1.6	
C3	Cloudy	Moderate	09:19	12.5	Surface	1.0	0.2	150	27.6	27.6	8.2	8.2	10.4	10.4	94.4	94.4	7.0	6.5	6.0	7.3	7	7	85	87	822091	817815	<0.2	<0.2	1.6	1.6
						1.0	0.2	160	27.5		8.2		10.4		94.3		7.0		5.9		6		86				<0.2		1.6	
					Middle	6.3	0.1	338	26.9	26.9	8.2	8.2	17.1	17.1	82.2	82.2	6.0		6.3		7		87				<0.2		1.8	
						6.3	0.1	345	26.9		8.2		17.1		82.1		6.0		6.5		7		88				<0.2		1.6	
					Bottom	11.5	0.1	83	24.9	24.9	8.0	8.0	30.4	30.4	56.8	57.0	4.0	4.0	9.7		6		89				<0.2		1.6	
						11.5	0.1	86	24.9		8.0		30.4		57.2		4.0		9.3		7		89				<0.2		1.5	
IM1	Sunny	Calm	10:24	4.7	Surface	1.0	0.1	328	27.4	27.5	7.9	7.9	12.5	12.5	81.6	81.8	6.0	6.1	6.7	7.7	7	7	83	86	817959	807129	<0.2	<0.2	1.7	1.7
						1.0	0.1	335	27.5		7.9		12.4		81.9		6.1		6.7		7		84				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.1	9	26.0	26.0	7.7	7.6	23.6	23.8	52.7	53.0	3.7	3.8	8.8		6		87				<0.2		1.7	
						3.7	0.1	9	26.0		7.6		23.9		53.2		3.8		8.7		6		89				<0.2		1.6	
IM2	Fine	Moderate	10:31	6.6	Surface	1.0	0.0	243	27.1	27.2	7.8	7.8	14.4	14.2	73.8	73.9	5.4	4.2	7.3	7.6	6	7	85	89	818170	806187	<0.2	<0.2	1.7	1.8
						1.0	0.0	249	27.2		7.8		14.0		74.0		5.4		7.3		7		86				<0.2		1.8	
					Middle	3.3	0.1	203	25.7	25.7	7.7	7.7	25.2	25.2	42.8	42.9	3.0		7.6		8		89				<0.2		1.8	
						3.3	0.1	219	25.7		7.7		25.2		43.0		3.0		7.6		8		90				<0.2		1.8	
					Bottom	5.6	0.0	356	25.4	25.4	7.7	7.7	27.9	27.8	44.0	44.1	3.1	3.1	7.9		7		90				<0.2		1.7	
						5.6	0.0	328	25.4		7.7		27.8		44.1		3.1		7.8		8		91				<0.2		1.7	
IM3	Fine	Moderate	10:38	7.0	Surface	1.0	0.2	234	27.3	27.3	7.8	7.8	12.0	12.1	76.0	75.7	5.6	4.4	7.1	8.3	7	7	83	88	818768	805588	<0.2	<0.2	1.9	1.9
						1.0	0.2	234	27.3		7.8		12.1		75.4		5.6		7.1		7		84				<0.2		1.8	
					Middle	3.5	0.2	233	25.6	25.7	7.7	7.7	25.6	25.4	43.5	43.7	3.1		7.9		8		88				<0.2		1.9	
						3.5	0.3	248	25.7		7.7		25.3		43.8		3.1		7.9		6		88				<0.2		1.9	
					Bottom	6.0	0.2	227	25.3	25.3	7.7	7.7	28.6	28.6	41.3	41.5	2.9	2.9	9.9		6		93				<0.2		1.8	
						6.0	0.2	229	25.3		7.7		28.6		41.7		2.9		10.1		7		92				<0.2		1.8	
IM4	Fine	Moderate	10:49	8.0	Surface	1.0	0.8	187	27.5	27.5	7.8	7.8	6.5	6.5	86.1	85.7	6.6	5.4	6.8	7.4	8	7	87	91	819717	804590	<0.2	<0.2	2.0	2.0
						1.0	0.9	196	27.4		7.8		6.5		85.2		6.5		7.0		7		88				<0.2		2.1	
					Middle	4.0	0.7	189	26.6	26.6	7.7	7.7	17.8	17.8	58.0	58.0	4.2		7.1		7		92				<0.2		1.8	
						4.0	0.8	206	26.6		7.7		17.8		58.0		4.2		7.2		8		92				<0.2		1.9	
					Bottom	7.0	0.1	207	25.6	25.6	7.7	7.7	25.9	25.8	41.8	42.0	3.0	3.0	8.0		7		94				<0.2		1.9	
						7.0	0.1	209	25.6		7.7		25.8		42.1		3.0		8.2		6		94				<0.2		2.0	
IM5	Fine	Moderate	10:58	7.4	Surface	1.0	0.6	201	27.9	27.9	7.8	7.8	4.9	4.9	91.1	90.9	7.0	6.1	6.8	6.8	6	5	88	91	820737	804848	<0.2	<0.2	2.0	2.0
						1.0	0.6	213	27.9		7.8		4.9		90.7		6.9		6.8		5		87				<0.2		2.0	
					Middle	3.7	0.7	200	27.1	27.1	7.7	7.7	12.1	12.7	70.7	70.9	5.3		6.3		5		91				<0.2		1.9	
						3.7	0.7	218	27.0		7.7		13.4		71.0		5.2		6.2		4		92				<0.2		1.9	
					Bottom	6.4	0.5	223	26.6	26.7	7.6	7.6	18.9	18.8	60.1	60.5	4.3	4.4	7.4		5		93				<0.2		2.0	
						6.4	0.5	228	26.7		7.6		18.8		60.9		4.4		7.3		5		94				<0.2		2.0	
IM6	Fine	Moderate	11:06	6.9	Surface	1.0	0.4	225	27.8	27.8	7.7	7.7	7.0	7.0	87.4	87.4	6.6	6.1	6.7	7.4	5	5	84	88	821079	805815	<0.2	<0.2	2.1	1.9
						1.0	0.4	236	27.8		7.7		7.0		87.4		6.6		6.7		6		85				<0.2		2.0	
					Middle	3.5	0.4	234	27.4	27.4	7.7	7.7	10.1	10.1	75.0	74.7	5.6		7.0		5		88				<0.2		1.8	
						3.5	0.4	247	27.4		7.7		10.1		74.4		5.6		7.0		4		88				<0.2		1.9	
					Bottom	5.9	0.3	264	26.4	26.4	7.6	7.6	20.3	20.3	53.3	53.5	3.8	3.9	8.8		6		93				<0.2		1.9	
						5.9	0.3	264	26.3		7.6		20.3		53.6		3.9		8.5		6		92				<0.2		1.8	
IM7	Fine	Moderate	11:16	7.6	Surface	1.0	0.4	237	27.9	27.9	7.7	7.7	8.7	8.7	85.9	85.9	6.4	6.0	6.4	6.6	6	6	85	89	821333	806815	<0.2	<0.2	1.8	1.7
						1.0	0.4	241	27.9		7.7		8.7		85.8		6.4		6.4		6		86				<0.2		1.9	
					Middle	3.8	0.4	239	27.4	27.4	7.7	7.7	10.7	10.7	76.0	75.8	5.7		6.1		6		89				<0.2		1.5	
						3.8	0.4	257	27.4		7.7		10.7		75.6		5.6		6.2		6		89				<0.2		1.6	
					Bottom	6.6	0.2	278	26.7	26.8	7.6	7.6	20.5	20.5	57.8	58.4	4.1	4.2	7.4		6		93				<0.2		1.6	
						6.6	0.2	289	26.8		7.6		20.4		59.0		4.2		7.1		5		93				<0.2		1.5	
IM8	Cloudy	Moderate	10:52	7.0	Surface	1.0	0.2	185	27.6	27.6	8.0	8.0	9.2	9.2	83.6	83.6	6.3	6.0	7.3	7.0	6	6	85	87	821816	808139	<0.2	<0.2	1.7	1.6
						1.0	0.2	194	27.6		8.0		9.2		83.6		6.3		7.3		6		85				<0.2		1.6	
					Middle	3.5	0.1	171	27.2	27.2	8.0	8.0	12.7	13.1	75.5	75.5	5.6		6.6		6		87				<0.2		1.6	
						3.5	0.1	171	27.2		8.0		13.4		75.4		5.6		6.6		6		88				<0.2		1.6	
					Bottom	6.0	0.0	81	26.6	26.6	7.9	7.9	17.8	17.8	62.8	62.8	4.6	4.6	7.5		7		89				<0.2		1.6	
						6.0	0.0	81	26.6		7.9		17.8		62.7		4.6		7.0		6		90				<0.2		1.7	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 16 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	10:46	7.4	Surface	1.0	0.3	133	27.4	27.4	8.0	8.0	9.0	9.0	82.5	82.5	6.2	6.0	6.9	7.8	5	6	86	88	822097	808812	<0.2	<0.2	1.6	1.8
						1.0	0.3	142	27.4		8.0		9.0		82.4		6.2		6.8		6		85				<0.2		1.6	
					Middle	3.7	0.2	119	27.1	27.1	8.0	8.0	12.7	12.7	77.4	77.3	5.7		7.2		6		87				<0.2		1.9	
						3.7	0.2	126	27.0		8.0		12.7		77.2		5.7		7.3		7		88				<0.2		1.8	
					Bottom	6.4	0.3	55	26.5	26.5	7.9	7.9	19.4	19.4	59.1	59.2	4.3	4.3	9.2		7		90				<0.2		1.9	
						6.4	0.3	55	26.5		7.9		19.4		59.2		4.3		9.4		6		89				<0.2		2.0	
IM10	Cloudy	Moderate	10:37	6.8	Surface	1.0	0.6	101	27.6	27.6	8.0	8.0	7.7	7.7	86.5	86.5	6.5	6.3	7.8	11.5	8	7	86	87	822375	809802	<0.2	<0.2	1.8	1.6
						1.0	0.7	101	27.6		8.0		7.7		86.5		6.5		7.7		7		85				<0.2		1.6	
					Middle	3.4	0.5	95	27.3	27.3	8.0	8.0	11.6	11.6	81.6	81.6	6.1		6.8		7		87				<0.2		1.6	
						3.4	0.5	98	27.3		8.0		11.6		81.6		6.1		6.9		7		88				<0.2		1.6	
					Bottom	5.8	0.5	71	26.6	26.6	7.9	7.9	15.8	15.4	64.4	64.1	4.7	4.7	19.9		7		89				<0.2		1.5	
						5.8	0.5	77	26.5		7.9		15.0		63.7		4.7		20.0		7		88				<0.2		1.5	
IM11	Cloudy	Moderate	10:23	7.7	Surface	1.0	0.6	139	27.7	27.8	8.0	8.0	8.2	8.5	86.8	86.8	6.5	5.7	7.9	8.6	7	7	85	88	822067	811481	<0.2	<0.2	1.6	1.6
						1.0	0.7	142	27.8		8.0		8.7		86.8		6.5		7.9		7		86				<0.2		1.6	
					Middle	3.9	0.5	138	27.0	27.0	7.9	7.9	15.8	15.6	65.6	65.6	4.8		8.3		7		87				<0.2		1.6	
						3.9	0.5	141	27.0		7.9		15.4		65.6		4.8		8.3		7		89				<0.2		1.6	
					Bottom	6.7	0.2	162	25.8	25.8	7.9	7.9	25.3	25.3	48.4	48.6	3.4	3.4	9.6		6		90				<0.2		1.6	
						6.7	0.2	167	25.8		7.9		25.2		48.7		3.4		9.6		6		89				<0.2		1.6	
IM12	Cloudy	Moderate	10:15	8.7	Surface	1.0	0.5	130	27.7	27.8	8.0	8.0	8.2	8.2	84.5	84.4	6.3	5.4	8.8	11.2	5	6	86	88	821474	812049	<0.2	<0.2	1.6	1.6
						1.0	0.5	139	27.8		8.0		8.2		84.2		6.3		8.8		6		85				<0.2		1.6	
					Middle	4.4	0.5	118	26.8	26.8	7.9	7.9	15.8	15.8	61.6	61.6	4.5		9.9		6		87				<0.2		1.6	
						4.4	0.5	127	26.7		7.9		15.8		61.6		4.5		10.2		6		88				<0.2		1.6	
					Bottom	7.7	0.1	162	25.9	25.9	7.9	7.9	24.3	24.4	49.6	49.6	3.5	3.5	15.1		6		89				<0.2		1.7	
						7.7	0.1	167	25.9		7.9		24.4		49.5		3.5		14.6		7		90				<0.2		1.7	
SR1A	Cloudy	Moderate	09:57	5.0	Surface	1.0	-	-	27.7	27.7	8.1	8.1	9.3	9.3	97.8	97.7	7.3	7.3	5.8	5.7	6	6	-	-	819978	812654	-	-	-	-
						1.0	-	-	27.7		8.1		9.3		97.6		7.3		5.8		6		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	27.7	27.7	8.1	8.1	10.0	10.0	96.5	96.5	7.2	7.2	5.7		6		-				-		-	
						4.0	-	-	27.7		8.1		10.0		96.4		7.2		5.7		7		-				-		-	
SR2	Cloudy	Moderate	09:44	4.5	Surface	1.0	0.4	91	27.5	27.5	8.1	8.1	8.9	8.9	90.8	90.8	6.8	6.8	6.3	6.2	8	8	86	88	821484	814185	<0.2	<0.2	1.6	1.6
						1.0	0.4	95	27.5		8.1		8.9		90.8		6.8		6.3		8		85				<0.2		1.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	57	27.6	27.6	8.1	8.1	12.1	12.1	90.8	90.8	6.7	6.7	6.0		8		89				<0.2		1.6	
						3.5	0.2	57	27.6		8.1		12.1		90.8		6.7		6.0		7		90				<0.2		1.6	
SR3	Cloudy	Moderate	10:58	8.8	Surface	1.0	0.5	206	27.3	27.3	8.0	8.0	8.2	8.2	80.3	80.1	6.1	5.5	7.2	9.0	6	6	-	-	822159	807587	-	-	-	-
						1.0	0.5	210	27.2		8.0		8.2		79.9		6.1		7.2		6		-				-		-	
					Middle	4.4	0.1	190	26.9	26.9	7.9	7.9	14.0	14.0	68.1	66.4	5.0		7.2		6		-				-		-	
						4.4	0.1	198	26.9		7.9		14.1		64.6		4.8		7.3		7		-				-		-	
					Bottom	7.8	0.2	346	26.2	26.2	7.8	7.8	22.4	22.4	59.0	59.1	4.2	4.2	12.7		6		-				-		-	
						7.8	0.2	318	26.2		7.8		22.4		59.2		4.2		12.7		7		-				-		-	
SR4A	Fine	Calm	09:44	9.2	Surface	1.0	0.0	268	27.6	27.6	8.1	8.0	13.0	13.0	89.9	88.5	6.6	4.9	7.3	9.1	9	8	-	-	817171	807823	-	-	-	-
						1.0	0.0	287	27.6		8.0		12.9		87.0		6.4		7.8		8		-				-		-	
					Middle	4.6	0.2	57	25.6	25.6	7.7	7.7	26.6	26.6	45.6	45.7	3.2		9.6		8		-				-		-	
						4.6	0.3	60	25.6		7.7		26.6		45.8		3.2		9.3		7		-				-		-	
					Bottom	8.2	0.2	73	25.6	25.6	7.7	7.7	26.8	26.8	49.0	49.2	3.4	3.5	10.3		7		-				-		-	
						8.2	0.2	77	25.6		7.7		26.8		49.4		3.5		10.4		6		-				-		-	
SR5A	Fine	Calm	09:27	3.6	Surface	1.0	0.0	103	28.0	28.0	8.3	8.3	10.6	10.6	120.7	120.7	8.9	8.9	7.2	8.3	9	8	-	-	816612	810686	-	-	-	-
						1.0	0.0	106	28.0		8.3		10.6		120.6		8.9		7.3		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	58	28.1	28.1	8.2	8.2	12.0	12.0	119.0	118.9	8.7	8.7	9.1		7		-				-		-	
						2.6	0.1	58	28.1		8.2		12.0		118.8		8.7		9.6		7		-				-		-	
SR6A	Fine	Calm	09:00	4.9	Surface	1.0	0.1	305	27.5	27.5	7.8	7.8	13.2	13.2	85.6	85.5	6.3	6.3	13.1	14.3	9	7	-	-	817976	814720	-	-	-	-
						1.0	0.1	319	27.5		7.8		13.3		85.3		6.3		13.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	0.1	174	27.3	27.3	7.8	7.8	15.6	15.6	75.3	75.5	5.5	5.5	15.6		6		-				-		-	
						3.9	0.1	182	27.3		7.8		15.5		75.6		5.5		15.1		6		-				-		-	
SR7	Cloudy	Moderate	08:42	16.2	Surface	1.0	0.3	109	27.2	27.2	8.1	8.1	14.8	14.8	85.7	85.6	6.3	6.1	4.2	5.0	6	7	-	-	823645	823724	-	-	-	-
						1.0	0.3	115	27.2		8.1		14.8		85.5		6.3		4.2		6		-				-		-	
					Middle	8.1	0.1	260	27.1	27.1	8.1	8.1	15.3	15.3	80.9	80.3	5.9		5.3		7		-				-		-	
						8.1	0.1	275	27.1		8.1		15.3		79.7		5.8		5.4		7		-				-		-	
					Bottom	15.2	0.0	111	24.4	24.4	7.8	7.8	32.4	32.4	50.4	50.4	3.5	3.5	5.5		6		-				-		-	
						15.2	0.0	113	24.4		7.8		32.4		50.4		3.5		5.5		7		-				-		-	
SR8	Cloudy	Moderate	10:08	5.3	Surface	1.0	-	-	27.3	27.3	8.1	8.1	8.8	8.8	88.5	88.5	6.7	6.7	10.1	10.9	6	6	-	-	820366	811617	-	-	-	-
						1.0	-	-	27.3		8.1		8.8		88.4		6.7		10.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	27.1	27.1	8.0	8.0	14.9	14.9	76.9	76.9	5.6	5.6	11.8		6		-				-		-	
						4.3	-	-	27.1		8.0		14.9		76.9		5.6		11.4		7		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 16 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	15:30	8.2	Surface	1.0	0.4	45	28.2	28.2	7.9	7.9	4.9	4.8	95.8	95.6	7.3	6.8	8.5	7.8	7	7	82	87	815600	804265	<0.2	<0.2	1.7	1.6
						1.0	0.4	45	28.2		7.9		4.6		95.4		7.3		8.5		8		82				<0.2		1.7	
					Middle	4.1	0.2	27	27.6	27.6	7.8	7.8	8.3	8.3	83.4	83.0	6.3		6.2		7		86				<0.2		1.7	
						4.1	0.3	28	27.6		7.8		8.3		82.6		6.2		6.3		7		87				<0.2		1.5	
					Bottom	7.2	0.3	48	25.8	25.8	7.7	7.7	25.2	25.2	47.6	47.7	3.4	3.4	8.7		8		91				<0.2		1.6	
						7.2	0.3	52	25.8		7.7		25.2		47.7		3.4		8.5		7		92				<0.2		1.5	
C2	Cloudy	Moderate	14:27	11.2	Surface	1.0	0.5	151	27.6	27.6	7.8	7.8	6.3	6.2	79.9	79.7	6.1	4.8	15.3	10.5	6	6	85	88	825691	806966	<0.2	<0.2	1.6	1.3
						1.0	0.6	153	27.6		7.8		6.1		79.5		6.1		15.5		6		86				<0.2		1.6	
					Middle	5.6	0.2	149	26.0	26.0	7.8	7.8	21.5	21.5	47.3	47.3	3.4		8.9		7		87				<0.2		1.2	
						5.6	0.2	154	26.0		7.8		21.5		47.3		3.4		8.9		6		88				<0.2		1.2	
					Bottom	10.2	0.1	280	25.8	25.8	7.8	7.8	24.7	24.7	46.5	46.5	3.3	3.3	7.1		6		89				<0.2		1.2	
						10.2	0.1	288	25.8		7.8		24.7		46.5		3.3		7.1		6		90				<0.2		1.2	
C3	Cloudy	Moderate	16:09	12.5	Surface	1.0	0.2	238	28.3	28.3	8.2	8.2	9.4	9.4	103.4	103.3	7.7	5.9	6.3	6.4	8	7	87	87	822097	817780	<0.2	<0.2	1.2	1.2
						1.0	0.2	247	28.3		8.2		9.4		103.2		7.6		6.3		7		85				<0.2		1.2	
					Middle	6.3	0.2	237	25.5	25.5	8.0	8.0	21.9	22.0	58.1	57.9	4.2		6.0		7		87				<0.2		1.3	
						6.3	0.2	238	25.4		8.0		22.0		57.6		4.2		6.3		7		87				<0.2		1.4	
					Bottom	11.5	0.4	288	25.1	25.1	7.9	7.9	30.4	30.4	48.9	49.0	3.4	3.4	6.9		7		89				<0.2		1.1	
						11.5	0.4	291	25.1		7.9		30.4		49.0		3.4		6.7		7		89				<0.2		1.0	
IM1	Fine	Calm	15:07	4.5	Surface	1.0	0.2	333	28.6	28.6	8.2	8.2	6.4	6.4	115.8	116.0	8.7	8.7	6.6	6.8	7	6	85	86	817928	807115	<0.2	<0.2	1.2	1.3
						1.0	0.2	306	28.6		8.2		6.4		116.1		8.7		6.7		6		85				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	277	28.6	28.6	8.2	8.2	8.1	8.2	116.0	115.9	8.6	8.6	6.9		6		87				<0.2		1.4	
						3.5	0.2	283	28.6		8.2		8.2		115.7		8.6		6.9		5		87				<0.2		1.3	
IM2	Fine	Moderate	15:00	6.8	Surface	1.0	0.5	22	28.5	28.5	8.1	8.1	5.0	5.0	108.5	108.3	8.2	7.8	6.8	7.3	6	6	85	88	818170	806176	<0.2	<0.2	1.3	1.2
						1.0	0.5	23	28.4		8.1		5.0		108.0		8.2		6.8		6		86				<0.2		1.2	
					Middle	3.4	0.5	348	28.0	28.0	8.0	8.0	7.8	7.8	97.2	97.1	7.3		7.1		5		88				<0.2		1.3	
						3.4	0.5	356	28.0		8.0		7.8		97.0		7.3		7.0		6		89				<0.2		1.2	
					Bottom	5.8	0.5	322	25.9	25.9	7.8	7.8	26.5	26.6	50.3	48.4	3.7	3.5	8.1		6		89				<0.2		1.2	
						5.8	0.5	337	25.9		7.7		26.7		46.5		3.3		8.0		6		90				<0.2		1.1	
IM3	Fine	Moderate	14:52	6.9	Surface	1.0	0.7	333	28.3	28.3	7.9	7.9	8.4	8.4	95.5	95.4	7.1	6.4	6.1	8.3	6	5	82	88	818784	805606	<0.2	<0.2	1.2	1.2
						1.0	0.7	359	28.3		7.9		8.4		95.3		7.1		6.2		5		84				<0.2		1.2	
					Middle	3.5	0.6	307	27.4	27.4	7.9	7.9	12.9	12.9	79.0	78.4	5.8		9.9		5		89				<0.2		1.3	
						3.5	0.6	321	27.4		7.9		12.8		77.7		5.7		9.9		6		90				<0.2		1.2	
					Bottom	5.9	0.4	265	25.5	25.5	7.7	7.7	27.3	27.3	42.2	42.3	3.0	3.0	8.9		5		91				<0.2		1.3	
						5.9	0.4	265	25.5		7.7		27.4		42.4		3.0		9.1		4		92				<0.2		1.2	
IM4	Fine	Moderate	14:44	7.4	Surface	1.0	0.7	284	27.8	27.8	7.9	7.9	10.8	10.8	91.6	91.4	6.8	6.6	6.6	7.8	6	6	82	86	819732	804588	<0.2	<0.2	1.3	1.3
						1.0	0.7	294	27.7		7.9		10.8		91.1		6.8		6.6		5		82				<0.2		1.3	
					Middle	3.7	0.6	291	27.5	27.5	7.9	7.9	12.1	12.1	87.2	86.9	6.4		7.0		6		86				<0.2		1.3	
						3.7	0.7	297	27.5		7.9		12.1		86.5		6.4		7.2		6		86				<0.2		1.3	
					Bottom	6.4	0.4	322	25.6	25.6	7.7	7.7	26.3	26.2	47.3	47.8	3.3	3.4	9.7		6		91				<0.2		1.3	
						6.4	0.4	335	25.6		7.7		26.2		48.2		3.4		9.7		7		91				<0.2		1.2	
IM5	Fine	Moderate	14:38	7.2	Surface	1.0	0.2	276	28.1	28.1	7.7	7.7	7.9	7.9	85.9	85.8	6.4	6.0	6.8	7.0	5	5	83	86	820743	804890	<0.2	<0.2	1.3	1.4
						1.0	0.2	283	28.0		7.7		7.9		85.7		6.4		6.7		5		83				<0.2		1.4	
					Middle	3.6	0.3	285	27.4	27.4	7.7	7.7	10.3	10.3	75.5	75.3	5.6		6.3		5		86				<0.2		1.5	
						3.6	0.3	312	27.4		7.7		10.3		75.1		5.6		6.2		5		86				<0.2		1.5	
					Bottom	6.2	0.2	326	25.8	25.8	7.7	7.7	24.5	24.3	47.8	48.0	3.4	3.4	8.0		5		90				<0.2		1.4	
						6.2	0.2	340	25.8		7.7		24.1		48.1		3.4		7.8		6		90				<0.2		1.3	
IM6	Fine	Moderate	14:31	6.9	Surface	1.0	0.5	242	27.8	27.8	7.7	7.7	7.4	7.4	84.8	84.6	6.4	6.0	7.4	7.8	5	5	84	87	821055	805829	<0.2	<0.2	1.1	1.3
						1.0	0.5	255	27.7		7.7		7.4		84.4		6.4		7.6		5		82				<0.2		1.1	
					Middle	3.5	0.5	258	27.4	27.4	7.7	7.7	11.8	11.7	74.8	74.7	5.5		8.2		5		87				<0.2		1.2	
						3.5	0.5	274	27.4		7.7		11.6		74.6		5.5		8.1		4		87				<0.2		1.3	
					Bottom	5.9	0.2	248	26.7	26.7	7.6	7.6	18.8	18.8	58.9	59.1	4.3	4.3	8.2		6		90				<0.2		1.4	
						5.9	0.2	258	26.7		7.6		18.8		59.2		4.3		7.6		6		90				<0.2		1.4	
IM7	Fine	Moderate	14:26	8.1	Surface	1.0	0.4	252	27.5	27.5	7.7	7.7	6.8	6.8	78.7	78.6	6.0	5.5	7.6	8.2	5	6	82	86	821333	806852	<0.2	<0.2	1.4	1.4
						1.0	0.4	267	27.4		7.7		6.8		78.5		6.0		7.5		6		82				<0.2		1.4	
					Middle	4.1	0.4	273	27.0	27.0	7.6	7.6	11.6	11.3	67.6	67.3	5.1		8.0		5		86				<0.2		1.4	
						4.1	0.4	276	26.9		7.7		11.0		66.9		5.0		8.6		6		87				<0.2		1.4	
					Bottom	7.1	0.2	283	26.4	26.5	7.6	7.6	20.5	20.4	53.7	53.8	3.9	3.9	9.0		5		90				<0.2		1.3	
						7.1	0.2	306	26.5		7.6		20.3		53.8		3.9		8.8		6		90				<0.2		1.2	
IM8	Cloudy	Moderate	14:50	7.5	Surface	1.0	0.4	256	27.6	27.6	7.9	7.9	7.2	7.2	87.5	87.5	6.6	6.2	7.9	10.5	6	7	85	87	821812	808142	<0.2	<0.2	1.0	1.1
						1.0	0.4	272	27.6		7.9		7.2		87.4		6.6		7.9		6		86				<0.2		1.1	
					Middle	3.8	0.4	255	27.3	27.2	7.9	7.9	7.7	8.2	76.0	75.9	5.8		8.5		6		87				<0.2		1.2	
						3.8	0.4	269	27.1		7.9		8.8		75.7		5.7		8.3		7		86				<0.2		1.2	
					Bottom	6.5	0.3	228	26.6	26.6	7.8	7.8	18.6	18.5	64.0	64.1	4.6	4.7	15.2		7		89				<0.2		1.1	
						6.5	0.3	239	26.6		7.8		18.5		64.2		4.7		15.1		7		88				<0.2		1.2	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 16 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	14:55	7.3	Surface	1.0	0.2	195	27.8	27.7	7.9	7.9	5.0	5.0	92.3	92.4	7.1	6.7	8.7	9.4	5	6	85	88	822113	808806	<0.2	<0.2	1.2	1.1
						1.0	0.2	196	27.6		7.9		5.0		92.4		7.1		8.7		4		86				<0.2		1.3	
					Middle	3.7	0.2	207	27.4	27.4	7.8	7.8	7.1	7.0	82.0	82.0	6.2		8.7		6		87				<0.2		1.1	
						3.7	0.2	220	27.4		7.8		7.0		82.0		6.2		8.8		6		88				<0.2		1.1	
					Bottom	6.3	0.2	260	27.2	27.2	7.8	7.8	13.7	13.7	70.6	70.6	5.2	5.2	10.8		6		89				<0.2		1.0	
						6.3	0.2	271	27.2		7.8		13.7		70.6		5.2		10.8		7		90				<0.2		1.1	
IM10	Cloudy	Moderate	15:02	7.2	Surface	1.0	0.0	175	27.7	27.7	7.9	7.9	5.5	5.4	83.7	83.7	6.4	6.3	10.6	10.6	6	6	84	87	822400	809778	<0.2	<0.2	1.0	1.2
						1.0	0.0	184	27.7		7.9		5.4		83.7		6.4		10.6		6		85				<0.2		1.1	
					Middle	3.6	0.1	1	27.3	27.3	7.9	7.9	8.0	8.0	81.9	81.7	6.2		10.7		5		87				<0.2		1.2	
						3.6	0.1	1	27.2		7.9		8.1		81.5		6.2		10.6		6		88				<0.2		1.3	
					Bottom	6.2	0.2	350	26.9	26.9	7.8	7.8	16.1	16.2	67.0	67.2	4.9	4.9	10.6		6		89				<0.2		1.1	
						6.2	0.2	322	26.9		7.8		16.2		67.4		4.9		10.6		5		90				<0.2		1.2	
IM11	Cloudy	Moderate	15:11	7.6	Surface	1.0	0.2	352	27.8	27.8	8.0	8.0	6.4	6.4	90.9	90.8	6.9	6.5	8.1	8.0	6	6	85	87	822066	811440	<0.2	<0.2	1.1	1.2
						1.0	0.2	324	27.8		8.0		6.5		90.6		6.9		8.0		6		86				<0.2		1.1	
					Middle	3.8	0.3	326	27.6	27.6	8.0	8.0	10.5	10.4	80.5	80.4	6.0		7.7		6		87				<0.2		1.2	
						3.8	0.3	336	27.6		8.0		10.4		80.2		6.0		7.8		6		87				<0.2		1.2	
					Bottom	6.6	0.6	285	26.3	26.3	7.9	7.9	21.7	21.7	59.1	59.2	4.2	4.2	8.2		6		87				<0.2		1.2	
						6.6	0.6	293	26.3		7.9		21.7		59.2		4.2		8.3		5		89				<0.2		1.2	
IM12	Cloudy	Moderate	15:17	8.2	Surface	1.0	0.2	306	27.8	27.8	8.1	8.1	8.4	8.4	89.1	89.1	6.7	6.2	7.7	6.3	5	5	84	87	821456	812069	<0.2	<0.2	1.1	1.1
						1.0	0.2	334	27.8		8.1		8.4		89.1		6.7		7.5		5		85				<0.2		1.1	
					Middle	4.1	0.6	300	27.3	27.3	8.1	8.1	13.4	13.3	78.2	77.5	5.8		5.1		5		87				<0.2		1.2	
						4.1	0.7	321	27.3		8.1		13.1		76.8		5.7		5.2		5		88				<0.2		1.1	
					Bottom	7.2	0.3	306	25.8	25.8	7.9	7.9	24.1	24.0	53.4	53.5	3.8	3.8	6.0		5		89				<0.2		1.1	
						7.2	0.3	323	25.8		7.9		24.0		53.5		3.8		6.1		5		89				<0.2		1.2	
SR1A	Cloudy	Moderate	15:36	5.2	Surface	1.0	-	-	28.3	28.3	8.4	8.4	9.0	9.0	121.3	121.6	9.0	9.0	6.2	10.3	6	-	-	-	819980	812654	-	-	-	-
						1.0	-	-	28.3		8.4		9.0		121.8		9.0		6.2		5		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	28.2	28.2	8.3	8.3	11.9	11.9	109.0	109.0	8.0	8.0	14.4		6		-				-		-	
						4.2	-	-	28.2		8.3		12.0		108.9		8.0		14.3		6		-				-		-	
SR2	Cloudy	Moderate	15:49	4.4	Surface	1.0	0.1	165	27.8	27.8	8.1	8.1	7.0	7.0	91.6	91.5	6.9	6.9	8.8	10.0	6	6	87	87	821439	814149	<0.2	<0.2	1.1	1.2
						1.0	0.1	165	27.8		8.1		7.0		91.4		6.9		8.9		6		86				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	0.0	45	27.3	27.3	8.0	8.0	15.0	15.0	77.9	77.6	5.6	5.6	11.1		6		88				<0.2		1.3	
						3.4	0.0	45	27.3		8.0		15.0		77.3		5.6		11.2		6		88				<0.2		1.1	
SR3	Cloudy	Moderate	14:44	8.1	Surface	1.0	0.4	308	28.3	28.3	8.0	8.0	7.3	7.2	81.3	81.0	6.1	5.5	6.9	6.4	5	5	-	-	822170	807588	-	-	-	-
						1.0	0.4	311	28.2		8.0		7.2		80.7		6.1		6.8		4		-				-		-	
					Middle	4.1	0.2	296	26.9	26.9	7.8	7.8	14.3	14.3	65.2	65.3	4.8		6.6		5		-				-		-	
						4.1	0.2	313	26.8		7.8		14.3		65.3		4.8		6.6		6		-				-		-	
					Bottom	7.1	0.1	236	26.4	26.4	7.8	7.8	20.2	20.2	61.4	61.5	4.4	4.4	5.8		5		-				-		-	
						7.1	0.2	250	26.4		7.8		20.2		61.6		4.4		5.6		6		-				-		-	
SR4A	Fine	Calm	15:48	9.6	Surface	1.0	0.1	28	28.8	28.8	8.4	8.4	8.8	8.9	138.0	137.9	10.2	9.6	7.9	8.5	8	7	-	-	817201	807825	-	-	-	-
						1.0	0.1	28	28.7		8.5		8.9		137.7		10.1		7.9		8		-				-		-	
					Middle	4.8	0.3	258	28.2	28.2	8.3	8.3	12.5	12.5	127.2	124.6	9.3		8.1		8		-				-		-	
						4.8	0.3	277	28.2		8.3		12.5		121.9		8.9		8.1		7		-				-		-	
					Bottom	8.6	0.3	241	26.0	26.0	7.8	7.8	24.8	24.9	57.1	59.7	4.0	4.2	9.7		6		-				-		-	
						8.6	0.3	246	26.0		7.8		24.9		62.2		4.4		9.6		7		-				-		-	
SR5A	Fine	Calm	16:04	4.0	Surface	1.0	0.2	251	28.2	28.2	8.5	8.5	11.9	11.8	146.6	145.8	10.7	10.7	6.9	7.1	11	10	-	-	816586	810679	-	-	-	-
						1.0	0.2	253	28.2		8.5		11.8		144.9		10.6		7.0		10		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.1	290	28.1	28.1	8.4	8.4	13.1	13.1	130.2	130.2	9.5	9.5	7.2		10		-				-		-	
						3.0	0.1	302	28.1		8.4		13.1		130.2		9.5		7.2		10		-				-		-	
SR6A	Fine	Calm	16:39	4.2	Surface	1.0	0.1	230	28.7	28.7	8.4	8.4	10.9	11.0	134.6	134.1	9.8	9.8	9.2	9.8	8	8	-	-	817940	814732	-	-	-	-
						1.0	0.1	232	28.6		8.4		11.1		133.6		9.7		9.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.0	174	28.6	28.6	8.3	8.3	11.2	11.2	132.6	132.4	9.7	9.7	10.3		9		-				-		-	
						3.2	0.0	186	28.6		8.3		11.2		132.1		9.6		10.1		9		-				-		-	
SR7	Cloudy	Moderate	16:41	16.4	Surface	1.0	0.0	248	27.5	27.5	8.2	8.2	13.7	13.7	94.0	94.1	6.9	5.7	4.9	5.5	7	7	-	-	823656	823744	-	-	-	-
						1.0	0.0	252	27.5		8.2		13.7		94.2		6.9		4.9		6		-				-		-	
					Middle	8.2	0.1	195	25.9	25.9	8.0	8.0	24.5	24.4	62.2	62.2	4.4		3.7		7		-				-		-	
						8.2	0.1	211	25.9		8.0		24.4		62.2		4.4		3.7		7		-				-		-	
					Bottom	15.4	0.1	192	24.8	24.8	8.0	8.0	30.6	30.6	48.8	48.9	3.4	3.4	7.9		6		-				-		-	
						15.4	0.1	205	24.8		8.0		30.6		48.9		3.4		8.0		6		-				-		-	
SR8	Cloudy	Moderate	15:26	4.5	Surface	1.0	-	-	28.4	28.4	8.2	8.2	8.2	8.2	100.6	100.6	7.5	7.5	7.9	8.2	6	5	-	-	820389	811604	-	-	-	-
						1.0	-	-	28.4		8.2		8.2		100.6		7.5		7.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	-	-	28.3	28.3	8.2	8.2	9.8	9.8	100.8	100.9	7.4	7.5	8.6		5		-				-		-	
						3.5	-	-	28.3		8.2		9.8		101.0		7.5		8.5		5		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 18 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	11:43	8.5	Surface	1.0	0.3	182	28.5	28.5	8.1	8.1	4.4	4.4	100.7	100.7	7.6	7.5	7.2	7.6	6	6	84	86	815611	804233	<0.2	<0.2	0.9	0.8
						1.0	0.3	186	28.5		8.1		4.4		100.6		7.6		7.2		6		84				<0.2		0.9	
					Middle	4.3	0.4	199	28.1	28.1	8.0	8.0	5.9	5.9	96.0	96.0	7.3		7.2		6		85				<0.2		0.7	
						4.3	0.4	217	28.1		8.0		6.0		96.0		7.3		7.2		6		85				<0.2		0.8	
					Bottom	7.5	0.8	235	25.9	25.9	8.0	8.0	24.5	24.5	50.8	51.0	3.6	3.6	8.5		6		90				<0.2		0.8	
						7.5	0.8	236	25.9		8.0		24.5		51.2		3.6		8.6		7		90				<0.2		0.7	
C2	Fine	Moderate	12:51	10.8	Surface	1.0	0.9	156	28.2	28.2	7.8	7.8	7.3	7.3	85.6	85.2	6.4	5.1	5.7	6.9	5	6	84	89	825687	806968	<0.2	<0.2	1.0	1.0
						1.0	0.9	160	28.2		7.8		7.3		84.8		6.4		5.7		6		85				<0.2		0.9	
					Middle	5.4	0.8	152	26.4	26.4	7.6	7.6	21.0	21.0	52.3	52.4	3.7		8.2		5		90				<0.2		1.0	
						5.4	0.8	155	26.4		7.6		21.0		52.4		3.8		8.1		6		90				<0.2		1.0	
					Bottom	9.8	0.5	150	25.8	25.8	7.6	7.6	25.1	25.1	45.1	45.0	3.2	3.2	7.0		6		91				<0.2		0.9	
						9.8	0.5	159	25.8		7.6		25.1		44.9		3.2		6.9		6		92				<0.2		0.9	
C3	Fine	Moderate	10:33	11.3	Surface	1.0	0.1	184	27.7	27.7	7.9	7.9	14.2	14.1	86.6	86.6	6.3	6.1	2.5	4.7	4	4	83	87	822116	817781	<0.2	<0.2	1.2	1.1
						1.0	0.1	193	27.7		7.9		14.1		86.5		6.3		2.5		3		84				<0.2		1.1	
					Middle	5.7	0.1	337	27.4	27.4	7.9	7.9	15.3	15.3	80.1	80.0	5.8		2.8		5		88				<0.2		1.2	
						5.7	0.1	349	27.3		7.9		15.4		79.9		5.8		2.8		4		88				<0.2		1.1	
					Bottom	10.3	0.2	33	26.2	26.3	7.8	7.8	24.2	24.1	66.2	66.5	4.7	4.7	8.8		5		90				<0.2		1.0	
						10.3	0.2	33	26.3		7.8		24.1		66.8		4.7		8.8		4		90				<0.2		1.0	
IM1	Fine	Moderate	12:04	4.7	Surface	1.0	0.4	39	28.8	28.8	8.1	8.1	6.0	6.0	101.0	101.0	7.6	7.6	6.4	7.1	5	6	85	87	817933	807134	<0.2	<0.2	0.7	0.8
						1.0	0.4	39	28.8		8.1		6.0		100.9		7.5		6.4		6		85				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	15	26.9	26.9	8.1	8.1	16.0	17.1	63.7	63.7	4.6	4.6	7.8		6		88				<0.2		0.8	
						3.7	0.3	15	26.9		8.1		18.1		63.6		4.5		7.8		6		88				<0.2		0.8	
IM2	Fine	Moderate	12:16	6.6	Surface	1.0	0.3	298	27.7	27.7	8.1	8.1	11.7	11.7	76.1	76.1	5.6	4.6	6.4	6.8	5	6	85	88	818184	806149	<0.2	<0.2	0.9	0.9
						1.0	0.3	317	27.7		8.1		11.6		76.0		5.6		6.4		5		85				<0.2		0.9	
					Middle	3.3	0.2	274	26.2	26.2	8.0	8.0	21.7	21.7	48.7	48.7	3.5		5.9		6		88				<0.2		0.8	
						3.3	0.2	300	26.2		8.0		21.7		48.7		3.5		5.9		5		88				<0.2		0.8	
					Bottom	5.6	0.2	240	25.3	25.3	8.0	8.0	28.6	28.6	39.2	39.3	2.7	2.8	8.3		6		90				<0.2		0.9	
						5.6	0.2	258	25.3		8.0		28.6		39.4		2.8		8.0		6		91				<0.2		1.0	
IM3	Fine	Moderate	12:23	6.8	Surface	1.0	0.2	240	27.4	27.4	8.1	8.1	12.6	12.7	73.5	73.2	5.4	4.6	6.7	7.7	6	6	85	88	818762	805593	<0.2	<0.2	0.9	0.9
						1.0	0.2	240	27.3		8.1		12.7		72.8		5.4		6.7		5		85				<0.2		0.9	
					Middle	3.4	0.3	239	26.5	26.5	8.1	8.1	20.6	20.6	52.6	52.6	3.8		6.9		6		88				<0.2		1.0	
						3.4	0.3	256	26.5		8.1		20.5		52.6		3.8		6.9		5		88				<0.2		0.9	
					Bottom	5.8	0.2	271	25.2	25.3	8.0	8.0	29.0	28.9	37.7	37.8	2.6	**2.6**	9.5		7		91				<0.2		0.7	
						5.8	0.3	273	25.3		8.0		28.9		37.8		2.6		9.2		6		90				<0.2		0.7	
IM4	Fine	Moderate	12:36	7.3	Surface	1.0	1.0	212	28.7	28.7	8.1	8.1	4.7	4.7	103.5	103.5	7.8	5.9	6.9	8.4	5	6	85	88	819747	804608	<0.2	<0.2	0.8	0.8
						1.0	1.1	219	28.7		8.1		4.7		103.4		7.8		7.0		6		85				<0.2		0.7	
					Middle	3.7	0.8	227	26.8	26.8	8.0	8.0	17.5	17.5	55.7	55.7	4.0		7.6		6		88				<0.2		0.7	
						3.7	0.9	240	26.7		8.0		17.6		55.6		4.0		7.8		5		88				<0.2		0.8	
					Bottom	6.3	0.4	227	25.6	25.6	8.0	8.0	26.4	26.4	38.6	38.7	2.7	2.7	10.8		6		91				<0.2		0.7	
						6.3	0.5	243	25.6		8.0		26.4		38.7		2.7		10.6		6		91				<0.2		0.9	
IM5	Fine	Moderate	12:52	7.1	Surface	1.0	0.8	229	28.4	28.4	8.1	8.1	6.0	6.0	97.8	97.8	7.4	6.3	6.5	9.0	5	5	85	88	820750	804889	<0.2	<0.2	0.8	0.8
						1.0	0.8	245	28.4		8.1		6.0		97.8		7.4		6.9		5		85				<0.2		0.7	
					Middle	3.6	0.8	247	27.3	27.3	8.0	8.0	15.2	15.2	70.9	71.2	5.2		8.9		5		88				<0.2		0.8	
						3.6	0.8	265	27.3		8.0		15.2		71.5		5.2		8.6		6		88				<0.2		0.8	
					Bottom	6.1	0.5	252	26.9	26.9	8.0	8.0	17.3	17.3	61.6	61.7	4.5	4.5	11.4		5		90				<0.2		0.8	
						6.1	0.5	253	26.9		8.0		17.3		61.8		4.5		11.6		6		91				<0.2		0.8	
IM6	Fine	Moderate	13:00	6.9	Surface	1.0	0.6	227	28.7	28.7	8.1	8.1	5.9	5.9	99.2	99.0	7.4	6.7	6.4	6.6	5	5	85	88	821045	805814	<0.2	<0.2	0.7	0.8
						1.0	0.6	247	28.7		8.1		5.9		98.7		7.4		6.4		5		85				<0.2		0.8	
					Middle	3.5	0.7	228	27.7	27.7	8.1	8.1	10.6	10.4	79.7	79.8	5.9		5.4		5		88				<0.2		0.8	
						3.5	0.7	238	27.7		8.1		10.2		79.8		5.9		5.4		5		88				<0.2		0.7	
					Bottom	5.9	0.7	238	26.4	26.4	8.0	8.0	20.6	20.6	55.2	55.3	4.0	4.0	8.3		6		91				<0.2		0.7	
						5.9	0.7	240	26.4		8.0		20.6		55.4		4.0		7.9		5		90				<0.2		0.8	
IM7	Fine	Moderate	13:10	8.0	Surface	1.0	0.6	259	28.7	28.7	8.1	8.1	7.3	7.3	95.2	95.0	7.1	6.3	6.0	6.6	5	5	85	88	821365	806835	<0.2	<0.2	0.8	0.8
						1.0	0.6	264	28.7		8.1		7.3		94.8		7.1		6.1		4		85				<0.2		0.8	
					Middle	4.0	0.5	278	27.4	27.4	8.1	8.1	12.9	12.9	73.0	73.0	5.4		4.1		5		88				<0.2		0.8	
						4.0	0.6	297	27.4		8.1		12.9		72.9		5.4		4.1		6		88				<0.2		0.8	
					Bottom	7.0	0.4	249	26.1	26.1	8.0	8.0	22.7	22.7	48.0	48.2	3.4	3.4	9.6		5		90				<0.2		0.8	
						7.0	0.4	272	26.1		8.0		22.7		48.3		3.4		9.5		6		91				<0.2		0.9	
IM8	Fine	Moderate	12:18	7.8	Surface	1.0	0.2	169	28.3	28.3	7.8	7.8	7.8	7.8	93.0	92.9	6.9	6.6	5.4	4.8	5	5	86	89	821835	808153	<0.2	<0.2	0.9	0.9
						1.0	0.2	177	28.3		7.8		7.8		92.8		6.9		5.4		5		86				<0.2		0.9	
					Middle	3.9	0.3	196	27.9	27.9	7.8	7.8	9.5	9.5	84.0	83.8	6.3		4.6		5		89				<0.2		0.9	
						3.9	0.3	208	27.9		7.8		9.5		83.5		6.2		4.6		5		90				<0.2		0.9	
					Bottom	6.8	0.1	267	27.3	27.4	7.7	7.7	16.3	16.4	70.9	71.1	5.1	5.2	4.3		6		91				<0.2		0.8	
						6.8	0.1	286	27.4		7.7		16.4		71.3		5.2		4.4		5		91				<0.2		0.9	

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Water Quality Monitoring
Water Quality Monitoring Results on 18 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	12:11	7.3	Surface	1.0	0.3	127	28.6	28.6	7.9	7.9	7.2	7.2	96.5	96.4	7.2	6.8	5.5	5.1	5	5	83	88	822087	808813	<0.2	<0.2	0.8	0.8
						1.0	0.3	128	28.5		7.9		7.3		96.3		7.2		5.5		4		82				<0.2		0.8	
					Middle	3.7	0.3	146	27.8	27.8	7.7	7.7	10.0	9.9	84.6	84.6	6.3		4.7		4		90				<0.2		0.9	
						3.7	0.3	153	27.8		7.7		9.9		84.6		6.3		4.7		5		90				<0.2		0.8	
					Bottom	6.3	0.2	74	27.4	27.4	7.7	7.7	12.2	12.4	74.7	74.5	5.5	5.5	5.0		5		91				<0.2		0.8	
						6.3	0.2	77	27.4		7.7		12.6		74.2		5.5		5.1		5		91				<0.2		0.8	
IM10	Fine	Moderate	12:01	7.4	Surface	1.0	0.7	144	28.4	28.4	7.8	7.8	8.0	8.0	91.6	91.5	6.8	6.4	5.2	6.3	6	6	81	85	822362	809803	<0.2	<0.2	0.9	0.9
						1.0	0.7	147	28.3		7.8		8.0		91.4		6.8		5.1		6		82				<0.2		0.9	
					Middle	3.7	0.6	132	27.7	27.7	7.7	7.7	10.5	10.5	80.5	80.4	6.0		4.5		6		85				<0.2		0.9	
						3.7	0.6	140	27.6		7.7		10.6		80.2		6.0		4.5		6		85				<0.2		1.0	
					Bottom	6.4	0.6	108	27.0	27.0	7.7	7.7	17.0	17.0	67.2	67.5	4.9	4.9	9.2		5		89				<0.2		0.9	
						6.4	0.6	113	27.0		7.7		17.0		67.8		4.9		9.2		5		89				<0.2		1.0	
IM11	Fine	Moderate	11:45	7.6	Surface	1.0	0.8	95	28.2	28.2	7.8	7.8	8.8	8.8	88.3	88.3	6.6	6.3	5.1	5.9	5	5	81	85	822034	811442	<0.2	<0.2	1.2	1.0
						1.0	0.8	103	28.2		7.8		8.8		88.2		6.6		5.1		6		82				<0.2		1.0	
					Middle	3.8	0.8	92	27.7	27.7	7.8	7.8	11.4	11.4	79.7	79.5	5.9		4.6		5		84				<0.2		1.0	
						3.8	0.8	95	27.6		7.8		11.5		79.3		5.9		5.0		5		85				<0.2		1.0	
					Bottom	6.6	0.4	74	26.4	26.4	7.7	7.7	21.1	21.2	62.7	65.2	4.5	4.7	7.9		4		89				<0.2		0.9	
						6.6	0.4	79	26.4		7.7		21.2		67.7		4.8		7.8		4		90				<0.2		0.8	
IM12	Fine	Moderate	11:36	9.9	Surface	1.0	0.6	94	28.2	28.2	7.8	7.8	9.6	9.6	86.1	85.9	6.4	5.8	5.1	8.6	6	5	80	85	821474	812050	<0.2	<0.2	1.0	1.0
						1.0	0.6	96	28.1		7.8		9.7		85.7		6.4		5.4		5		81				<0.2		1.1	
					Middle	5.0	0.3	63	27.2	27.2	7.7	7.7	14.5	14.3	71.2	71.2	5.2		7.5		6		84				<0.2		0.9	
						5.0	0.4	66	27.1		7.7		14.1		71.2		5.2		8.1		5		84				<0.2		1.0	
					Bottom	8.9	0.4	99	26.3	26.3	7.7	7.7	21.9	21.9	59.1	59.5	4.2	4.3	12.8		5		89				<0.2		1.0	
						8.9	0.4	104	26.3		7.7		22.0		59.8		4.3		12.7		4		89				<0.2		1.0	
SR1A	Fine	Calm	11:15	4.7	Surface	1.0	-	-	28.3	28.3	7.9	7.9	10.1	10.1	96.6	96.6	7.1	7.1	4.0	3.8	6	6	-	-	819982	812659	-	-	-	-
						1.0	-	-	28.3		7.9		10.2		96.6		7.1		3.9		5		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	28.1	28.1	7.9	7.9	11.1	11.1	94.8	94.9	7.0	7.0	3.7		7		-				-		-	
						3.7	-	-	28.0		7.9		11.2		95.0		7.0		3.8		6		-				-		-	
SR2	Fine	Moderate	11:00	5.0	Surface	1.0	0.4	91	28.2	28.2	7.8	7.8	8.5	8.6	94.3	94.1	7.0	7.0	4.7	5.0	4	5	81	83	821455	814169	<0.2	<0.2	1.0	1.1
						1.0	0.4	93	28.1		7.8		8.6		93.9		7.0		4.8		4		81				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.2	45	27.7	27.8	7.8	7.8	12.1	12.1	84.3	84.5	6.2	6.2	5.3		5		84				<0.2		1.0	
						4.0	0.2	48	27.8		7.8		12.1		84.7		6.2		5.3		5		84				<0.2		1.0	
SR3	Fine	Moderate	12:25	8.8	Surface	1.0	0.2	212	28.4	28.4	7.8	7.8	7.7	7.7	92.9	92.7	6.9	6.2	5.5	7.1	5	5	-	-	822131	807590	-	-	-	-
						1.0	0.3	222	28.4		7.8		7.7		92.4		6.9		5.4		6		-				-		-	
					Middle	4.4	0.3	215	27.4	27.4	7.7	7.7	11.8	11.8	74.3	74.1	5.5		4.5		5		-				-		-	
						4.4	0.3	223	27.3		7.7		11.9		73.9		5.5		4.5		4		-				-		-	
					Bottom	7.8	0.3	227	26.4	26.4	7.6	7.6	21.3	21.3	55.6	55.9	4.0	4.0	11.4		4		-				-		-	
						7.8	0.3	230	26.4		7.6		21.3		56.1		4.0		11.4		5		-				-		-	
SR4A	Fine	Calm	11:20	9.4	Surface	1.0	0.1	277	28.7	28.7	8.0	8.0	5.6	5.6	95.7	95.7	7.2	5.1	6.3	9.1	6	6	-	-	817185	807814	-	-	-	-
						1.0	0.1	304	28.7		8.0		5.6		95.6		7.2		6.3		6		-				-		-	
					Middle	4.7	0.1	275	25.8	25.8	8.0	8.0	25.1	25.0	40.3	40.3	2.9		8.6		6		-				-		-	
						4.7	0.1	281	25.8		8.0		25.0		40.3		2.9		8.5		7		-				-		-	
					Bottom	8.4	0.0	120	25.5	25.5	8.1	8.1	27.3	27.3	40.0	40.2	2.8	2.8	12.4		6		-				-		-	
						8.4	0.0	123	25.5		8.1		27.3		40.4		2.8		12.4		7		-				-		-	
SR5A	Fine	Calm	11:02	3.8	Surface	1.0	0.1	211	28.8	28.8	8.1	8.1	8.1	8.1	113.5	113.4	8.4	8.4	6.9	7.5	6	7	-	-	816600	810702	-	-	-	-
						1.0	0.1	222	28.8		8.1		8.1		113.3		8.4		6.9		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.0	195	28.2	28.2	8.1	8.1	14.8	14.8	98.8	98.9	7.1	7.1	8.1		7		-				-		-	
						2.8	0.0	196	28.1		8.1		14.7		99.0		7.1		8.2		8		-				-		-	
SR6A	Fine	Calm	10:29	4.1	Surface	1.0	0.3	29	27.7	27.7	8.1	8.1	13.9	13.9	75.8	75.8	5.5	5.5	12.6	13.2	14	14	-	-	817958	814727	-	-	-	-
						1.0	0.3	30	27.7		8.1		13.9		75.7		5.5		12.7		14		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	185	27.2	27.2	8.0	8.0	16.8	16.8	68.6	68.7	5.0	5.0	13.8		13		-				-		-	
						3.1	0.1	193	27.2		8.0		16.7		68.7		5.0		13.8		13		-				-		-	
SR7	Fine	Moderate	09:47	15.7	Surface	1.0	0.7	45	27.5	27.5	7.8	7.8	15.1	15.1	83.0	83.0	6.0	5.8	2.3	2.3	5	4	-	-	823623	823734	-	-	-	-
						1.0	0.8	46	27.5		7.8		15.1		83.0		6.0		2.3		4		-				-		-	
					Middle	7.9	0.5	0	27.3	27.3	7.8	7.8	16.6	16.6	78.5	78.3	5.7		2.1		5		-				-		-	
						7.9	0.5	0	27.3		7.8		16.6		78.1		5.6		2.1		4		-				-		-	
					Bottom	14.7	0.4	352	24.9	24.9	7.6	7.6	30.6	30.6	51.1	51.1	3.6	3.6	2.7		4		-				-		-	
						14.7	0.4	324	24.9		7.6		30.6		51.0		3.6		2.6		4		-				-		-	
SR8	Fine	Moderate	11:26	4.6	Surface	1.0	-	-	28.0	28.0	7.8	7.8	10.6	10.6	88.7	88.7	6.6	6.6	6.6	6.4	8	8	-	-	820395	811641	-	-	-	-
						1.0	-	-	28.0		7.8		10.6		88.7		6.6		6.5		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	-	-	27.8	27.8	7.8	7.8	11.6	11.7	86.0	86.1	6.3	6.3	6.3		7		-				-		-	
						3.6	-	-	27.8		7.8		11.9		86.1		6.3		6.4		7		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 18 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	17:38	8.0	Surface	1.0	0.7	27	28.9	28.9	8.1	8.1	6.1	6.1	102.7	102.7	7.7	7.2	8.4	9.6	10	9	84	87	815605	804259	<0.2	<0.2	0.7	0.7
						1.0	0.7	29	28.9		8.1		6.1		102.6		7.7		8.4		9		84				<0.2		0.6	
					Middle	4.0	0.5	32	28.2	28.2	8.0	8.0	9.5	9.2	88.5	88.6	6.6		7.7		10		87				<0.2		0.7	
						4.0	0.6	32	28.2		8.0		9.0		88.6		6.6		7.7		9		87				<0.2		0.6	
					Bottom	7.0	0.2	43	27.1	27.1	8.0	8.0	15.8	16.0	65.7	65.8	4.8	4.8	12.8		8		90				<0.2		0.6	
						7.0	0.2	46	27.1		8.0		16.1		65.9		4.8		12.5		8		89				<0.2		0.7	
C2	Fine	Moderate	16:18	11.1	Surface	1.0	0.7	151	28.5	28.5	7.8	7.8	3.7	3.7	90.4	90.3	6.9	5.5	12.9	12.5	11	11	86	89	825671	806962	<0.2	<0.2	1.1	1.4
						1.0	0.7	151	28.5		7.8		3.7		90.2		6.9		13.0		11		87				<0.2		1.2	
					Middle	5.6	0.4	136	26.6	26.6	7.7	7.7	18.6	18.6	57.5	57.4	4.2		9.3		10		90				<0.2		1.5	
						5.6	0.4	143	26.5		7.7		18.7		57.2		4.1		9.2		10		90				<0.2		1.4	
					Bottom	10.1	0.3	328	26.2	26.3	7.7	7.7	22.5	22.5	57.9	58.3	4.1	4.2	15.1		11		91				<0.2		1.4	
						10.1	0.3	341	26.3		7.7		22.5		58.6		4.2		15.2		12		91				<0.2		1.5	
C3	Fine	Moderate	18:15	11.1	Surface	1.0	0.2	209	28.5	28.5	7.9	7.9	9.9	9.9	93.2	93.1	6.9	5.4	4.2	6.4	4	5	87	89	822115	817783	<0.2	<0.2	1.1	1.1
						1.0	0.2	209	28.5		7.9		9.9		93.0		6.8		4.2		6		87				<0.2		1.0	
					Middle	5.6	0.3	238	26.4	26.4	7.7	7.7	21.3	21.3	56.6	56.6	4.0		3.5		4		90				<0.2		1.1	
						5.6	0.3	258	26.4		7.7		21.3		56.5		4.0		3.5		5		90				<0.2		1.0	
					Bottom	10.1	0.3	274	25.2	25.2	7.7	7.7	28.6	28.6	49.7	50.1	3.5	3.5	11.6		4		91				<0.2		1.1	
						10.1	0.3	288	25.2		7.7		28.6		50.5		3.5		11.3		4		91				<0.2		1.0	
IM1	Fine	Moderate	17:10	4.3	Surface	1.0	0.0	1	29.0	29.0	8.0	8.0	6.0	6.0	111.6	111.6	8.3	8.3	8.5	8.1	9	9	88	88	817940	807152	<0.2	<0.2	0.8	0.8
						1.0	0.0	1	29.0		8.0		6.0		111.6		8.3		8.5		8		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	208	29.0	29.0	8.0	8.0	6.3	6.3	111.3	111.3	8.3	8.3	7.6		9		89				<0.2		0.8	
						3.3	0.1	211	29.0		8.0		6.3		111.2		8.3		7.6		9		89				<0.2		0.8	
IM2	Fine	Moderate	17:03	6.4	Surface	1.0	0.6	336	28.8	28.8	8.1	8.1	6.0	6.0	102.1	102.1	7.6	7.5	10.0	12.2	8	8	86	88	818165	806171	<0.2	<0.2	0.8	0.8
						1.0	0.6	309	28.7		8.1		6.0		102.1		7.6		10.2		8		85				<0.2		0.8	
					Middle	3.2	0.5	318	28.6	28.6	8.1	8.1	6.8	6.8	98.4	98.4	7.3		12.5		8		88				<0.2		0.8	
						3.2	0.6	348	28.6		8.1		6.8		98.3		7.3		12.5		8		88				<0.2		0.8	
					Bottom	5.4	0.5	304	26.7	26.7	8.0	8.0	21.7	22.9	48.8	48.9	3.4	3.4	14.0		8		91				<0.2		0.8	
						5.4	0.6	304	26.7		8.0		24.1		48.9		3.4		14.2		8		90				<0.2		0.9	
IM3	Fine	Moderate	16:55	6.6	Surface	1.0	0.7	307	28.7	28.7	8.1	8.1	6.4	6.4	103.8	103.8	7.7	7.7	8.4	9.3	5	6	85	89	818768	805580	<0.2	<0.2	0.8	0.9
						1.0	0.7	314	28.7		8.1		6.4		103.7		7.7		8.4		6		86				<0.2		0.8	
					Middle	3.3	0.6	292	28.8	28.8	8.1	8.1	6.8	6.8	103.3	103.2	7.7		8.4		6		89				<0.2		0.9	
						3.3	0.7	303	28.8		8.1		6.8		103.1		7.7		8.5		5		89				<0.2		0.9	
					Bottom	5.6	0.5	278	25.8	25.9	8.0	8.0	26.8	26.6	54.6	54.5	3.8	3.8	11.4		6		91				<0.2		0.9	
						5.6	0.5	298	25.9		8.0		26.5		54.4		3.8		11.0		6		91				<0.2		0.9	
IM4	Fine	Moderate	16:43	7.4	Surface	1.0	0.6	305	28.9	28.9	8.1	8.1	6.6	6.6	104.4	104.4	7.8	7.5	7.5	8.2	6	6	85	88	819741	804620	<0.2	<0.2	0.8	0.9
						1.0	0.7	312	28.9		8.1		6.6		104.4		7.8		7.5		5		85				<0.2		0.9	
					Middle	3.7	0.5	296	28.7	28.7	8.1	8.1	7.1	7.1	97.6	97.5	7.3		7.4		5		88				<0.2		0.8	
						3.7	0.6	296	28.7		8.1		7.1		97.4		7.2		7.4		6		88				<0.2		0.9	
					Bottom	6.4	0.1	298	25.6	25.6	8.0	8.0	26.3	26.3	48.7	48.8	3.4	3.4	9.8		6		90				<0.2		0.8	
						6.4	0.1	300	25.6		8.0		26.3		48.9		3.4		9.6		6		91				<0.2		0.9	
IM5	Fine	Moderate	16:33	6.7	Surface	1.0	0.5	295	28.9	28.9	8.1	8.1	7.0	7.0	103.1	103.1	7.7	7.6	7.0	7.8	6	6	84	88	820757	804852	<0.2	<0.2	1.0	1.0
						1.0	0.5	311	28.9		8.1		7.0		103.1		7.6		7.0		6		85				<0.2		1.0	
					Middle	3.4	0.5	283	28.8	28.8	8.0	8.0	7.1	7.1	101.0	101.1	7.5		6.9		6		88				<0.2		1.0	
						3.4	0.6	306	28.8		8.0		7.1		101.1		7.5		6.9		6		88				<0.2		1.0	
					Bottom	5.7	0.4	259	27.5	27.5	8.1	8.1	12.5	12.4	76.3	76.3	5.6	5.6	9.6		6		90				<0.2		1.0	
						5.7	0.4	261	27.5		8.1		12.4		76.2		5.6		9.7		6		90				<0.2		1.0	
IM6	Fine	Moderate	16:24	6.5	Surface	1.0	0.8	289	28.6	28.6	8.1	8.1	7.3	7.3	93.2	93.2	6.9	6.3	8.1	11.4	6	7	85	88	821044	805848	<0.2	<0.2	1.3	1.3
						1.0	0.8	313	28.6		8.1		7.3		93.1		6.9		8.1		6		85				<0.2		1.2	
					Middle	3.3	0.5	280	27.5	27.5	8.1	8.1	11.3	11.3	76.8	76.8	5.7		11.5		6		88				<0.2		1.3	
						3.3	0.5	281	27.5		8.1		11.3		76.8		5.7		11.7		7		88				<0.2		1.3	
					Bottom	5.5	0.3	271	27.3	27.3	8.1	8.1	13.5	13.5	72.4	72.5	5.3	5.3	14.4		7		90				<0.2		1.2	
						5.5	0.3	283	27.3		8.1		13.5		72.5		5.3		14.5		8		90				<0.2		1.2	
IM7	Fine	Moderate	16:18	7.9	Surface	1.0	0.6	253	28.5	28.5	8.1	8.1	5.2	5.2	92.7	92.7	7.0	6.5	9.3	9.3	7	7	85	88	821353	806827	<0.2	<0.2	1.2	1.2
						1.0	0.6	272	28.4		8.2		5.2		92.6		7.0		9.3		6		84				<0.2		1.1	
					Middle	4.0	0.6	273	27.7	27.7	8.1	8.1	10.8	10.8	79.9	79.9	5.9		7.8		7		88				<0.2		1.2	
						4.0	0.7	300	27.7		8.1		10.8		79.9		5.9		7.7		6		88				<0.2		1.2	
					Bottom	6.9	0.4	259	26.8	26.8	8.0	8.0	17.2	17.3	62.7	62.9	4.6	4.6	10.7		8		90				<0.2		1.2	
						6.9	0.4	272	26.8		8.0		17.3		63.0		4.6		10.8		9		90				<0.2		1.2	
IM8	Fine	Moderate	16:43	7.2	Surface	1.0	0.3	232	28.9	28.9	7.8	7.8	4.2	4.3	96.0	96.0	7.2	7.0	10.9	9.1	8	8	86	89	821838	808138	<0.2	<0.2	1.2	1.2
						1.0	0.3	250	28.9		7.8		4.4		95.9		7.2		10.8		7		86				<0.2		1.2	
					Middle	3.6	0.3	245	28.4	28.4	7.7	7.7	7.3	7.3	90.5	90.5	6.8		7.7		8		90				<0.2		1.3	
						3.6	0.4	260	28.4		7.7		7.3		90.4		6.8		7.7		7		90				<0.2		1.2	
					Bottom	6.2	0.3	247	27.5	27.5	7.6	7.6	12.0	12.0	75.3	75.4	5.6	5.6	8.6		9		91				<0.2		1.2	
						6.2	0.3	266	27.5		7.6		12.0		75.5		5.6		8.9		8		91				<0.2		1.2	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 18 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	16:51	6.8	Surface	1.0	0.2	254	28.8	28.8	7.8	7.8	5.3	5.4	95.9	95.9	7.2	7.1	9.5	8.9	7	8	84	86	822101	808809	<0.2	<0.2	1.2	1.2
						1.0	0.2	255	28.8		7.8		5.4		95.9		7.2		9.5		8		83				<0.2		1.2	
					Middle	3.4	0.1	269	28.6	28.6	7.8	7.8	6.6	6.8	93.4	93.5	7.0		8.3		8		86				<0.2		1.2	
						3.4	0.1	272	28.6		7.8		7.0		93.5		7.0		8.4		9		86				<0.2		1.2	
					Bottom	5.8	0.2	268	28.2	28.2	7.7	7.7	8.7	8.7	87.6	87.6	6.5	6.5	8.8		8		89				<0.2		1.2	
						5.8	0.2	289	28.2		7.7		8.7		87.5		6.5		8.7		9		90				<0.2		1.2	
IM10	Fine	Moderate	17:00	6.7	Surface	1.0	0.1	254	29.0	29.0	7.9	7.9	3.7	3.7	99.3	99.3	7.5	7.2	10.8	8.6	8	8	85	89	822364	809796	<0.2	<0.2	1.3	1.2
						1.0	0.1	276	29.0		7.9		3.7		99.3		7.5		10.7		8		86				<0.2		1.1	
					Middle	3.4	0.2	296	28.5	28.5	7.8	7.8	7.5	7.5	92.2	92.1	6.9		6.7		8		89				<0.2		1.2	
						3.4	0.2	300	28.4		7.8		7.5		92.0		6.9		6.8		8		89				<0.2		1.2	
					Bottom	5.7	0.3	288	27.9	27.9	7.7	7.7	11.8	11.8	79.8	79.8	5.9	5.9	8.3		9		91				<0.2		1.3	
						5.7	0.3	292	27.8		7.7		11.8		79.8		5.9		8.3		8		91				<0.2		1.2	
IM11	Fine	Moderate	17:11	7.4	Surface	1.0	0.3	303	28.9	28.9	7.8	7.8	7.5	7.5	96.4	96.5	7.1	6.6	6.2	8.1	5	6	85	88	822060	811468	<0.2	<0.2	1.2	1.2
						1.0	0.3	326	28.9		7.8		7.5		96.5		7.1		6.3		5		85				<0.2		1.2	
					Middle	3.7	0.5	306	28.0	28.0	7.7	7.7	10.9	10.9	83.1	82.9	6.1		5.1		6		89				<0.2		1.2	
						3.7	0.5	310	28.0		7.7		10.9		82.7		6.1		5.1		6		89				<0.2		1.2	
					Bottom	6.4	0.3	274	26.5	26.5	7.6	7.6	20.2	20.2	59.5	59.9	4.3	4.3	13.0		6		90				<0.2		1.2	
						6.4	0.3	289	26.5		7.6		20.2		60.2		4.3		13.1		8		91				<0.2		1.2	
IM12	Fine	Moderate	17:19	8.7	Surface	1.0	0.4	288	28.3	28.3	7.8	7.8	9.4	9.3	91.6	91.8	6.8	6.7	4.9	5.2	5	5	86	89	821469	812065	<0.2	<0.2	1.2	1.2
						1.0	0.4	301	28.3		7.8		9.3		92.0		6.8		4.9		4		86				<0.2		1.1	
					Middle	4.4	0.7	286	27.9	27.9	7.9	7.9	12.7	13.3	89.4	89.5	6.5		4.3		5		89				<0.2		1.2	
						4.4	0.7	310	27.9		7.9		13.9		89.5		6.5		4.3		4		90				<0.2		1.2	
					Bottom	7.7	0.4	290	26.2	26.2	7.6	7.6	22.4	22.4	57.5	57.9	4.1	4.2	6.4		5		91				<0.2		1.2	
						7.7	0.4	295	26.2		7.6		22.4		58.3		4.2		6.4		5		91				<0.2		1.2	
SR1A	Fine	Calm	17:39	5.0	Surface	1.0	-	-	29.0	29.0	8.1	8.1	9.9	9.9	108.3	108.4	7.9	7.9	4.3	7.1	4	4	-	-	819976	812657	-	-	-	-
						1.0	-	-	29.0		8.1		9.9		108.5		7.9		4.3		4		-				-		-	
					Middle	2.5	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.5	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	29.0	29.0	8.1	8.1	11.1	11.1	109.1	109.0	7.9	7.9	10.0		4		-				-		-	
						4.0	-	-	29.0		8.1		11.1		108.8		7.9		9.8		5		-				-		-	
SR2	Fine	Moderate	17:52	4.6	Surface	1.0	0.1	183	28.6	28.6	7.9	7.9	8.4	8.4	97.5	97.4	7.2	7.2	5.0	5.0	4	4	85	88	821478	814146	<0.2	<0.2	1.1	1.1
						1.0	0.1	194	28.5		7.9		8.4		97.3		7.2		5.0		4		85				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	133	27.8	27.8	7.8	7.8	14.2	14.2	84.4	84.6	6.1	6.2	5.0		4		90				<0.2		1.1	
						3.6	0.1	139	27.8		7.8		14.2		84.7		6.2		5.1		5		90				<0.2		1.1	
SR3	Fine	Moderate	16:36	8.0	Surface	1.0	0.5	195	28.7	28.7	7.8	7.8	4.8	4.7	93.7	93.7	7.1	6.3	10.8	10.1	8	9	-	-	822140	807570	-	-	-	-
						1.0	0.6	200	28.6		7.8		4.6		93.6		7.1		10.6		9		-				-		-	
					Middle	4.0	0.5	213	27.6	27.6	7.6	7.6	11.3	11.3	74.7	74.7	5.5		8.3		9		-				-		-	
						4.0	0.5	213	27.6		7.6		11.3		74.7		5.5		8.3		9		-				-		-	
					Bottom	7.0	0.3	215	27.4	27.4	7.6	7.6	12.3	12.3	73.6	73.8	5.4	5.5	11.4		9		-				-		-	
						7.0	0.4	219	27.4		7.6		12.3		73.9		5.5		11.4		8		-				-		-	
SR4A	Fine	Calm	17:58	9.6	Surface	1.0	0.2	61	29.3	29.3	8.1	8.1	8.1	8.1	115.8	115.8	8.5	8.3	13.3	12.6	12	12	-	-	817199	807811	-	-	-	-
						1.0	0.2	64	29.3		8.1		8.1		115.8		8.5		13.2		11		-				-		-	
					Middle	4.8	0.1	225	29.1	29.1	8.1	8.1	12.1	12.1	111.7	111.7	8.0		8.7		12		-				-		-	
						4.8	0.1	240	29.1		8.1		12.1		111.7		8.0		8.6		12		-				-		-	
					Bottom	8.6	0.1	252	26.5	26.6	8.1	8.1	21.4	21.4	51.5	51.8	3.7	3.7	15.8		12		-				-		-	
						8.6	0.1	271	26.6		8.1		21.4		52.0		3.7		16.0		13		-				-		-	
SR5A	Fine	Calm	18:15	3.5	Surface	1.0	0.1	263	29.2	29.2	8.2	8.2	11.8	11.8	122.8	122.8	8.8	8.8	7.5	7.7	8	7	-	-	816586	810689	-	-	-	-
						1.0	0.1	270	29.2		8.2		11.8		122.7		8.8		7.5		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.2	342	29.0	29.0	8.1	8.1	12.2	12.2	118.2	118.2	8.5	8.5	7.8		7		-				-		-	
						2.5	0.2	315	29.0		8.1		12.2		118.2		8.5		7.8		7		-				-		-	
SR6A	Fine	Calm	18:59	4.3	Surface	1.0	0.0	230	28.8	28.8	8.0	8.0	10.7	10.7	108.2	108.3	7.9	7.9	5.1	5.3	8	8	-	-	817962	814755	-	-	-	-
						1.0	0.0	241	28.8		8.0		10.7		108.3		7.9		5.1		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.0	318	29.3	29.3	8.0	8.0	11.6	11.6	114.9	115.0	8.3	8.3	5.5		6		-				-		-	
						3.3	0.0	343	29.2		8.0		11.5		115.1		8.3		5.5		7		-				-		-	
SR7	Fine	Moderate	18:49	15.8	Surface	1.0	0.1	208	28.2	28.2	7.9	7.9	13.1	13.1	91.5	91.6	6.6	6.1	2.8	3.0	3	3	-	-	823612	823748	-	-	-	-
						1.0	0.2	220	28.2		7.9		13.0		91.6		6.6		2.8		3		-				-		-	
					Middle	7.9	0.2	111	27.2	27.2	7.8	7.8	19.4	19.4	78.6	78.5	5.6		2.6		2		-				-		-	
						7.9	0.3	116	27.2		7.8		19.5		78.3		5.6		2.6		4		-				-		-	
					Bottom	14.8	0.2	53	25.5	25.6	7.7	7.7	29.1	29.1	53.2	53.6	3.7	3.7	3.6		4		-				-		-	
						14.8	0.2	54	25.6		7.8		29.2		54.0		3.7		3.6		2		-				-		-	
SR8	Fine	Moderate	17:29	4.9	Surface	1.0	-	-	28.8	28.8	7.9	7.9	8.9	8.9	99.5	99.5	7.3	7.3	4.6	5.2	4	4	-	-	820400	811604	-	-	-	-
						1.0	-	-	28.8		7.9		8.9		99.4		7.3		4.6		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.9	-	-	28.7	28.7	7.9	7.9	9.3	9.5	96.9	96.9	7.1	7.1	5.7		5		-				-		-	
						3.9	-	-	28.6		7.9		9.6		96.8		7.1		5.9		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	12:49	8.0	Surface	1.0	0.8	164	29.1	29.1	8.1	8.1	8.4	8.4	100.8	100.7	7.4	7.0	5.2	6.6	5	5	85	88	815628	804232	<0.2	<0.2	0.9	1.0
						1.0	0.9	167	29.1		8.1		8.4		100.5		7.4		5.2		5		85				<0.2		0.9	
					Middle	4.0	0.7	212	28.4	28.4	8.0	8.0	10.7	10.8	88.4	88.4	6.5		5.7		5		88				<0.2		1.1	
						4.0	0.7	230	28.4		8.0		10.8		88.3		6.5		5.7		5		88				<0.2		0.9	
					Bottom	7.0	0.7	232	25.4	25.4	7.9	7.9	28.0	28.0	42.0	42.1	2.9	3.0	8.8		5		90				<0.2		0.9	
						7.0	0.7	243	25.4		7.9		28.0		42.1		3.0		9.0		6		90				<0.2		1.0	
C2	Cloudy	Moderate	13:38	11.9	Surface	1.0	0.8	174	28.5	28.5	7.9	7.9	10.1	10.1	77.9	77.9	5.7	4.8	5.7	7.1	4	5	85	88	825682	806930	<0.2	<0.2	1.2	1.2
						1.0	0.8	183	28.5		7.9		10.1		77.8		5.7		5.7		4		86				<0.2		1.2	
					Middle	6.0	0.6	167	26.3	26.3	7.9	7.9	23.4	23.5	53.6	53.7	3.8		6.1		5		87				<0.2		1.1	
						6.0	0.7	176	26.3		7.9		23.6		53.7		3.8		6.1		5		88				<0.2		1.1	
					Bottom	10.9	0.4	151	26.1	26.1	7.9	7.9	24.3	24.3	56.0	56.2	4.0	4.0	9.2		6		90				<0.2		1.2	
						10.9	0.4	153	26.1		7.9		24.3		56.3		4.0		9.8		6		90				<0.2		1.2	
C3	Cloudy	Moderate	11:37	11.4	Surface	1.0	0.3	277	27.4	27.4	8.1	8.1	17.6	17.6	84.1	84.0	6.0	5.9	2.8	3.4	4	5	85	88	822115	817820	<0.2	<0.2	1.2	1.2
						1.0	0.3	287	27.4		8.1		17.6		83.8		6.0		2.8		5		87				<0.2		1.2	
					Middle	5.7	0.3	302	27.2	27.2	8.1	8.1	19.8	19.8	82.4	82.3	5.9		2.4		5		88				<0.2		1.2	
						5.7	0.4	307	27.2		8.1		19.8		82.2		5.8		2.4		5		87				<0.2		1.2	
					Bottom	10.4	0.3	124	25.9	25.9	8.0	8.0	26.4	26.4	68.5	68.7	4.8	4.8	5.0		5		90				<0.2		1.1	
						10.4	0.3	128	25.9		8.0		26.4		68.9		4.8		4.9		5		90				<0.2		1.1	
IM1	Fine	Moderate	13:12	4.5	Surface	1.0	0.3	25	29.4	29.4	8.1	8.1	10.3	10.3	97.6	97.6	7.0	7.0	5.0	5.2	5	4	86	87	817934	807137	<0.2	<0.2	0.9	0.9
						1.0	0.3	27	29.4		8.1		10.3		97.5		7.0		5.0		4		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.2	7	28.1	28.2	8.1	8.1	16.4	16.1	75.7	77.6	5.4	5.6	5.3		4		89				<0.2		0.9	
						3.5	0.2	7	28.2		8.1		15.9		79.4		5.7		5.3		4		88				<0.2		1.0	
IM2	Fine	Moderate	13:19	6.6	Surface	1.0	0.1	271	28.4	28.4	8.0	8.0	13.0	13.5	82.8	82.2	6.0	4.7	5.3	6.0	4	5	85	88	818185	806156	<0.2	<0.2	0.9	0.9
						1.0	0.1	271	28.4		8.0		14.0		81.5		5.8		5.3		5		85				<0.2		0.9	
					Middle	3.3	0.2	322	25.9	25.9	8.0	8.0	25.5	25.5	47.9	47.9	3.4		5.3		5		88				<0.2		0.9	
						3.3	0.2	338	25.9		8.0		25.5		47.9		3.4		5.3		6		88				<0.2		0.9	
					Bottom	5.6	0.1	331	25.5	25.6	8.0	8.0	28.5	28.4	43.8	44.0	3.1	3.1	7.5		6		90				<0.2		0.9	
						5.6	0.1	340	25.6		8.0		28.4		44.1		3.1		7.5		5		90				<0.2		1.0	
IM3	Fine	Moderate	13:27	6.7	Surface	1.0	0.2	189	28.0	28.0	8.0	8.0	16.2	16.2	72.7	72.7	5.2	4.4	8.3	8.5	6	9	85	87	818790	805583	<0.2	<0.2	1.0	0.9
						1.0	0.2	207	28.0		8.0		16.2		72.6		5.2		8.3		7		84				<0.2		0.9	
					Middle	3.4	0.2	259	26.2	26.2	7.9	7.9	23.9	23.9	50.5	50.4	3.6		5.6		9		87				<0.2		0.9	
						3.4	0.3	280	26.2		7.9		23.9		50.3		3.6		5.7		10		88				<0.2		0.9	
					Bottom	5.7	0.1	256	25.2	25.2	7.9	7.9	28.8	28.8	37.8	37.9	2.6	2.7	11.5		9		90				<0.2		0.9	
						5.7	0.1	278	25.2		7.9		28.8		38.0		2.7		11.4		10		90				<0.2		0.9	
IM4	Fine	Moderate	13:38	7.6	Surface	1.0	1.2	196	28.9	28.9	8.1	8.1	9.9	9.9	92.5	92.5	6.7	5.7	5.3	9.1	6	8	85	88	819709	804622	<0.2	<0.2	0.9	0.9
						1.0	1.2	214	28.9		8.1		9.9		92.4		6.7		5.3		7		85				<0.2		1.0	
					Middle	3.8	0.8	191	27.3	27.3	8.0	8.0	17.6	17.6	65.0	65.1	4.7		8.9		7		88				<0.2		0.9	
						3.8	0.8	202	27.3		8.0		17.6		65.1		4.7		9.3		8		88				<0.2		1.0	
					Bottom	6.6	0.5	193	26.6	26.6	8.0	8.0	21.8	21.9	53.9	53.9	3.8	3.8	12.7		10		91				<0.2		0.8	
						6.6	0.5	200	26.6		8.0		22.0		53.9		3.8		13.3		11		90				<0.2		1.0	
IM5	Fine	Moderate	13:51	6.9	Surface	1.0	1.1	224	29.3	29.3	8.0	8.0	9.7	9.7	94.1	93.9	6.8	6.1	5.1	9.8	4	5	84	87	820719	804882	<0.2	<0.2	0.9	0.9
						1.0	1.2	239	29.2		8.0		9.7		93.7		6.8		5.1		5		85				<0.2		0.8	
					Middle	3.5	1.0	229	27.7	27.7	8.0	8.0	14.5	14.5	76.1	74.9	5.5		8.8		4		87				<0.2		1.0	
						3.5	1.0	240	27.7		8.0		14.4		73.6		5.3		9.1		5		87				<0.2		0.9	
					Bottom	5.9	0.8	223	27.2	27.2	8.0	8.0	17.8	17.8	64.0	64.0	4.6	4.6	15.5		6		90				<0.2		0.9	
						5.9	0.9	232	27.2		8.0		17.8		64.0		4.6		15.4		5		90				<0.2		1.0	
IM6	Fine	Moderate	14:02	6.6	Surface	1.0	1.2	243	27.9	27.9	7.9	7.9	14.6	14.6	76.0	76.1	5.5	5.1	5.1	7.1	5	5	85	88	821073	805822	<0.2	<0.2	0.9	1.0
						1.0	1.2	248	27.9		7.9		14.6		76.1		5.5		5.3		5		85				<0.2		0.9	
					Middle	3.3	1.1	242	27.4	27.4	7.9	7.9	18.2	18.1	65.6	65.7	4.7		6.7		4		87				<0.2		1.0	
						3.3	1.2	262	27.4		7.9		18.0		65.8		4.7		6.7		6		88				<0.2		1.0	
					Bottom	5.6	0.9	242	26.5	26.5	7.8	7.8	21.8	21.8	53.0	53.1	3.8	3.8	9.4		6		90				<0.2		0.9	
						5.6	0.9	242	26.5		7.8		21.8		53.1		3.8		9.4		5		90				<0.2		1.0	
IM7	Fine	Moderate	14:12	7.8	Surface	1.0	0.8	243	28.8	28.8	8.0	8.0	11.5	11.5	91.4	91.3	6.6	5.8	4.6	5.5	5	5	84	87	821356	806855	<0.2	<0.2	0.9	0.9
						1.0	0.8	259	28.8		8.0		11.5		91.2		6.6		4.6		5		85				<0.2		1.0	
					Middle	3.9	0.7	243	27.5	27.5	8.0	8.0	16.8	16.7	68.2	68.2	4.9		4.4		5		87				<0.2		1.0	
						3.9	0.8	267	27.5		8.0		16.7		68.2		4.9		4.4		5		87				<0.2		0.9	
					Bottom	6.8	0.6	244	26.9	26.9	8.0	8.0	19.4	19.4	59.1	59.1	4.2	4.2	7.6		5		90				<0.2		0.8	
						6.8	0.6	260	26.9		8.0		19.4		59.1		4.2		7.6		5		89				<0.2		0.9	
IM8	Cloudy	Moderate	13:09	7.2	Surface	1.0	0.1	180	28.9	28.9	8.1	8.1	11.3	11.3	88.2	88.0	6.4	5.5	4.4	5.9	6	5	86	88	821807	808143	<0.2	<0.2	1.1	1.2
						1.0	0.1	194	28.9		8.1		11.3		87.7		6.3		4.4		5		86				<0.2		1.2	
					Middle	3.6	0.1	143	27.4	27.4	7.9	7.9	16.8	16.8	65.4	65.4	4.7		5.8		5		88				<0.2		1.3	
						3.6	0.1	144	27.4		7.9		16.8		65.4		4.7		5.9		5		88				<0.2		1.1	
					Bottom	6.2	0.1	92	26.9	27.0	7.9	7.9	20.2	20.2	61.6	61.9	4.4	4.4	7.4		5		90				<0.2		1.1	
						6.2	0.1	101	27.0		7.9		20.2		62.2		4.4		7.4		4		90				<0.2		1.2	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	13:03	7.1	Surface	1.0	0.2	154	28.3	28.3	8.1	8.1	11.4	11.4	88.2	86.4	6.5	5.5	4.2	6.6	4	4	85	88	822096	808800	<0.2	<0.2	1.3	1.2
						1.0	0.2	157	28.2		8.1		11.4		84.5		6.2		4.3		4		86				<0.2		1.2	
					Middle	3.6	0.2	138	27.1	27.1	7.9	7.9	17.1	17.1	63.4	63.3	4.6		6.8		4		88				<0.2		1.2	
						3.6	0.2	140	27.0		7.9		17.2		63.1		4.6		7.2		5		89				<0.2		1.2	
					Bottom	6.1	0.2	77	26.7	26.7	7.9	7.9	20.8	20.8	58.1	58.3	4.1	4.2	8.6		4		90				<0.2		1.2	
						6.1	0.3	79	26.7		7.9		20.8		58.4		4.2		8.5		5		90				<0.2		1.2	
IM10	Cloudy	Moderate	12:55	7.2	Surface	1.0	0.3	106	29.2	29.2	8.1	8.1	10.8	10.8	92.3	92.2	6.7	5.6	4.2	6.4	5	6	86	88	822408	809775	<0.2	<0.2	1.3	1.2
						1.0	0.3	109	29.2		8.1		10.8		92.0		6.6		4.2		6		86				<0.2		1.2	
					Middle	3.6	0.3	94	27.1	27.1	7.9	7.9	18.5	18.9	62.1	62.0	4.5		6.4		6		88				<0.2		1.1	
						3.6	0.3	98	27.1		7.9		19.3		61.9		4.4		7.0		5		89				<0.2		1.1	
					Bottom	6.2	0.2	94	26.8	26.8	7.9	7.9	20.3	20.3	62.8	63.0	4.5	4.5	8.1		6		90				<0.2		1.3	
						6.2	0.2	95	26.8		7.9		20.3		63.1		4.5		8.7		5		90				<0.2		1.2	
IM11	Cloudy	Moderate	12:42	8.5	Surface	1.0	0.2	90	28.6	28.6	8.1	8.1	11.3	11.3	85.0	84.9	6.2	5.3	4.4	7.5	7	5	86	88	822054	811472	<0.2	<0.2	1.2	1.2
						1.0	0.3	94	28.6		8.1		11.3		84.7		6.2		4.5		6		86				<0.2		1.2	
					Middle	4.3	0.3	109	26.9	26.9	7.9	7.9	18.5	18.5	61.8	61.7	4.5		7.7		5		87				<0.2		1.2	
						4.3	0.3	113	26.9		7.9		18.5		61.6		4.4		8.1		5		87				<0.2		1.2	
					Bottom	7.5	0.1	114	26.7	26.7	7.9	7.9	21.2	21.2	61.6	61.8	4.4	4.4	10.4		5		90				<0.2		1.2	
						7.5	0.1	115	26.7		7.9		21.1		61.9		4.4		10.1		4		90				<0.2		1.2	
IM12	Cloudy	Moderate	12:35	8.2	Surface	1.0	0.3	73	28.4	28.4	8.0	8.0	13.4	13.4	84.0	83.8	6.1	5.5	5.7	5.7	2	3	86	88	821466	812046	<0.2	<0.2	1.2	1.2
						1.0	0.3	74	28.3		8.0		13.5		83.6		6.0		5.8		2		86				<0.2		1.2	
					Middle	4.1	0.1	105	27.5	27.5	8.0	8.0	16.6	16.7	69.6	69.4	5.0		6.1		3		88				<0.2		1.2	
						4.1	0.1	107	27.5		8.0		16.7		69.2		5.0		6.3		4		87				<0.2		1.1	
					Bottom	7.2	0.1	267	27.2	27.2	8.0	8.0	18.3	18.4	67.9	68.0	4.9	4.9	5.2		4		90				<0.2		1.2	
						7.2	0.1	271	27.2		8.0		18.4		68.0		4.9		5.2		5		90				<0.2		1.2	
SR1A	Cloudy	Moderate	12:16	5.2	Surface	1.0	-	-	28.3	28.3	8.1	8.1	13.2	13.2	90.5	90.4	6.6	6.6	4.2	4.0	3	3	-	-	819981	812654	-	-	-	-
						1.0	-	-	28.3		8.1		13.2		90.3		6.6		4.2		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	27.9	28.0	8.1	8.1	15.5	15.5	82.7	82.9	5.9	6.0	3.9		3		-				-		-	
						4.2	-	-	28.0		8.1		15.4		83.1		6.0		3.9		3		-				-		-	
SR2	Cloudy	Moderate	12:02	4.6	Surface	1.0	0.2	49	28.4	28.4	8.1	8.1	12.4	12.4	87.7	87.6	6.4	6.4	4.1	4.9	2	3	86	88	821475	814160	<0.2	<0.2	1.3	1.3
						1.0	0.3	49	28.3		8.1		12.4		87.4		6.4		4.2		3		88				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	71	27.6	27.7	8.1	8.1	16.1	16.1	76.6	76.9	5.5	5.6	5.6		3		90				<0.2		1.2	
						3.6	0.2	72	27.7		8.1		16.1		77.1		5.6		5.6		3		89				<0.2		1.2	
SR3	Cloudy	Moderate	13:14	8.6	Surface	1.0	0.2	206	28.8	28.8	8.1	8.1	11.6	11.7	86.5	86.4	6.3	5.4	3.9	6.0	5	4	-	-	822158	807593	-	-	-	-
						1.0	0.2	213	28.7		8.1		11.7		86.2		6.2		3.9		4		-				-		-	
					Middle	4.3	0.0	331	27.3	27.3	7.9	7.9	17.9	17.8	64.7	64.7	4.6		5.2		4		-				-		-	
						4.3	0.0	331	27.3		7.9		17.8		64.7		4.6		5.8		4		-				-		-	
					Bottom	7.6	0.0	319	26.5	26.5	7.9	7.9	22.2	22.2	57.3	57.5	4.1	4.1	8.7		3		-				-		-	
						7.6	0.0	326	26.5		7.9		22.2		57.7		4.1		8.5		3		-				-		-	
SR4A	Fine	Calm	12:27	9.2	Surface	1.0	0.2	254	28.8	28.8	8.1	8.1	10.9	10.9	90.1	90.0	6.6	4.6	5.8	9.7	6	6	-	-	817169	807805	-	-	-	-
						1.0	0.3	274	28.8		8.1		10.9		89.8		6.5		5.8		6		-				-		-	
					Middle	4.6	0.1	104	25.4	25.4	8.0	8.0	28.3	28.3	38.3	38.4	2.7		11.0		6		-				-		-	
						4.6	0.1	105	25.4		8.0		28.3		38.4		2.7		11.0		6		-				-		-	
					Bottom	8.2	0.1	45	25.3	25.3	8.0	8.0	28.6	28.6	41.0	41.1	2.9	2.9	12.2		6		-				-		-	
						8.2	0.1	45	25.3		8.0		28.6		41.1		2.9		12.3		6		-				-		-	
SR5A	Fine	Calm	12:11	3.7	Surface	1.0	0.0	179	28.9	28.9	8.1	8.1	12.7	12.7	100.8	100.8	7.2	7.2	7.0	7.3	6	6	-	-	816601	810717	-	-	-	-
						1.0	0.0	184	28.9		8.1		12.8		100.7		7.2		7.0		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.0	260	28.7	28.7	8.1	8.1	13.4	13.4	93.9	94.1	6.7	6.8	7.6		7		-				-		-	
						2.7	0.0	281	28.7		8.1		13.4		94.2		6.8		7.7		6		-				-		-	
SR6A	Fine	Calm	11:37	4.1	Surface	1.0	0.0	325	27.9	27.9	7.9	7.9	14.5	14.5	78.7	78.7	5.7	5.7	6.4	8.6	8	8	-	-	817986	814729	-	-	-	-
						1.0	0.0	338	27.9		7.9		14.5		78.6		5.7		6.4		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	243	27.6	27.6	7.8	7.8	17.1	17.1	73.2	73.2	5.2	5.2	10.8		7		-				-		-	
						3.1	0.1	251	27.6		7.8		17.1		73.2		5.2		10.9		7		-				-		-	
SR7	Cloudy	Moderate	10:55	16.2	Surface	1.0	0.4	83	28.1	28.1	8.1	8.1	14.5	14.5	99.8	99.6	7.2	6.6	2.7	2.8	4	4	-	-	823625	823721	-	-	-	-
						1.0	0.4	87	28.1		8.1		14.5		99.4		7.2		2.6		4		-				-		-	
					Middle	8.1	0.3	76	27.5	27.5	8.1	8.1	18.4	18.4	83.0	82.7	5.9		2.8		5		-				-		-	
						8.1	0.3	80	27.5		8.1		18.4		82.3		5.9		2.8		4		-				-		-	
					Bottom	15.2	0.1	136	25.6	25.6	7.9	7.9	28.2	28.1	57.6	57.8	4.0	4.0	2.9		3		-				-		-	
						15.2	0.1	139	25.6		7.9		28.0		57.9		4.0		2.9		3		-				-		-	
SR8	Cloudy	Moderate	12:28	4.8	Surface	1.0	-	-	28.2	28.2	8.1	8.1	12.9	12.9	88.3	88.1	6.4	6.4	5.4	5.5	3	3	-	-	820375	811626	-	-	-	-
						1.0	-	-	28.2		8.1		13.0		87.9		6.4		5.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	27.8	27.8	8.1	8.1	15.5	15.5	78.5	78.7	5.7	5.7	5.6		2		-				-		-	
						3.8	-	-	27.8		8.1		15.5		78.8		5.7		5.6		2		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Fine	Moderate	19:09	8.2	Surface	1.0	0.6	30	28.8	28.8	8.1	8.1	11.4	11.4	86.9	86.7	6.3	5.6	9.0	12.3	4	6	85	87	815611	804236	<0.2	<0.2	1.0	0.9
						1.0	0.6	30	28.8		8.1		11.5		86.5		6.3		9.0		6		84				<0.2		0.9	
					Middle	4.1	0.4	13	27.6	27.6	7.9	7.9	17.0	16.7	67.6	67.5	4.8		12.8		6		88				<0.2		0.8	
						4.1	0.4	14	27.6		7.9		16.4		67.4		4.8		12.9		6		87				<0.2		0.9	
					Bottom	7.2	0.4	34	26.3	26.3	7.9	7.9	23.4	23.4	49.8	49.9	3.5	3.5	15.1		7		89				<0.2		0.9	
						7.2	0.4	35	26.3		7.9		23.4		49.9		3.5		14.9		6		90				<0.2		0.9	
C2	Cloudy	Moderate	17:47	11.2	Surface	1.0	0.7	154	29.2	29.3	7.8	7.8	7.5	7.3	86.6	86.7	6.3	5.2	10.3	12.2	6	6	85	88	825660	806929	<0.2	<0.2	1.2	1.2
						1.0	0.7	164	29.3		7.8		7.2		86.7		6.4		10.7		5		86				<0.2		1.1	
					Middle	5.6	0.4	138	26.9	26.9	7.6	7.6	18.2	18.2	56.0	56.0	4.0		12.5		5		88				<0.2		1.2	
						5.6	0.4	142	26.9		7.6		18.1		56.0		4.0		12.6		6		87				<0.2		1.2	
					Bottom	10.2	0.3	330	26.2	26.2	7.6	7.6	22.8	22.7	46.2	46.2	3.3	3.3	13.5		5		90				<0.2		1.2	
						10.2	0.4	353	26.1		7.6		22.5		46.1		3.3		13.6		6		90				<0.2		1.1	
C3	Cloudy	Moderate	19:27	12.2	Surface	1.0	0.2	205	28.2	28.2	7.9	7.9	15.2	15.2	82.5	82.3	5.9	5.0	3.2	6.6	4	4	86	88	822127	817795	<0.2	<0.2	1.2	1.2
						1.0	0.2	211	28.2		7.9		15.2		82.0		5.9		3.3		4		86				<0.2		1.0	
					Middle	6.1	0.3	235	26.1	26.1	7.7	7.7	23.6	23.7	57.2	57.1	4.1		5.6		4		88				<0.2		1.2	
						6.1	0.3	252	26.0		7.7		23.7		57.0		4.1		5.7		3		89				<0.2		1.2	
					Bottom	11.2	0.3	272	25.3	25.3	7.8	7.8	28.7	28.7	52.1	52.3	3.6	3.7	11.4		4		90				<0.2		1.2	
						11.2	0.3	280	25.3		7.8		28.6		52.5		3.7		10.5		3		90				<0.2		1.3	
IM1	Fine	Moderate	18:45	4.1	Surface	1.0	0.0	1	29.2	29.2	8.1	8.1	12.4	12.4	100.8	100.8	7.2	7.2	6.2	8.7	4	5	86	88	817953	807145	<0.2	<0.2	0.8	0.9
						1.0	0.0	1	29.2		8.1		12.4		100.8		7.2		6.4		5		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	207	28.4	28.5	8.1	8.1	16.4	16.3	88.3	88.4	6.3	6.3	11.2		5		89				<0.2		0.8	
						3.1	0.1	212	28.5		8.1		16.2		88.5		6.3		10.9		4		89				<0.2		0.9	
IM2	Fine	Moderate	18:36	6.2	Surface	1.0	0.1	58	28.5	28.5	8.1	8.0	15.5	15.5	86.2	86.1	6.1	5.8	8.3	11.7	7	7	86	88	818186	806183	<0.2	<0.2	0.9	0.9
						1.0	0.1	61	28.5		8.0		15.5		86.0		6.1		8.4		8		85				<0.2		0.8	
					Middle	3.1	0.6	345	28.0	28.0	8.0	8.0	16.2	16.2	77.0	77.0	5.5		11.9		8		88				<0.2		1.0	
						3.1	0.6	317	28.0		8.0		16.2		76.9		5.5		11.8		7		89				<0.2		0.9	
					Bottom	5.2	0.5	350	27.4	27.4	7.9	7.9	18.2	18.1	66.1	66.0	4.7	4.7	14.8		7		91				<0.2		0.9	
						5.2	0.6	358	27.4		7.9		18.0		65.8		4.7		15.3		6		91				<0.2		0.9	
IM3	Fine	Moderate	18:27	6.5	Surface	1.0	0.7	315	28.2	28.2	8.0	8.0	16.1	16.1	79.8	79.8	5.7	5.4	10.2	13.0	6	7	85	88	818784	805579	<0.2	<0.2	0.9	0.9
						1.0	0.8	343	28.2		8.0		16.1		79.7		5.7		10.2		6		85				<0.2		0.9	
					Middle	3.3	0.7	324	27.7	27.7	8.0	8.0	18.0	18.0	71.4	71.4	5.1		12.1		6		88				<0.2		1.0	
						3.3	0.7	353	27.7		8.0		18.0		71.4		5.1		12.3		7		88				<0.2		0.9	
					Bottom	5.5	0.6	315	25.6	25.7	7.9	7.9	27.6	27.6	53.1	53.0	3.7	3.7	16.7		8		90				<0.2		0.9	
						5.5	0.6	322	25.7		7.9		27.5		52.9		3.7		16.4		8		91				<0.2		1.0	
IM4	Fine	Moderate	18:15	7.2	Surface	1.0	0.6	317	28.9	28.9	8.1	8.1	13.1	13.1	94.5	94.5	6.8	6.5	6.6	7.5	5	5	85	88	819710	804618	<0.2	<0.2	1.2	1.0
						1.0	0.7	344	28.9		8.1		13.1		94.4		6.8		6.6		5		85				<0.2		1.2	
					Middle	3.6	0.5	324	28.6	28.6	8.1	8.1	14.3	14.3	87.2	87.2	6.2		6.6		6		88				<0.2		1.0	
						3.6	0.6	341	28.6		8.1		14.3		87.1		6.2		6.5		4		88				<0.2		0.9	
					Bottom	6.2	0.4	332	26.1	26.1	7.9	7.9	25.1	25.1	51.7	52.0	3.6	3.7	9.4		4		90				<0.2		1.0	
						6.2	0.4	333	26.1		7.9		25.2		52.2		3.7		9.4		5		90				<0.2		0.9	
IM5	Fine	Moderate	18:06	6.5	Surface	1.0	0.4	308	29.2	29.2	8.1	8.1	8.2	8.2	95.7	95.8	7.0	7.0	7.7	8.8	6	6	85	88	820722	804845	<0.2	<0.2	1.3	1.3
						1.0	0.4	323	29.2		8.1		8.2		95.8		7.0		7.8		6		85				<0.2		1.2	
					Middle	3.3	0.4	325	29.2	29.2	8.0	8.0	11.1	11.1	96.0	95.9	6.9		8.3		6		88				<0.2		1.4	
						3.3	0.4	331	29.2		8.0		11.1		95.8		6.9		8.3		5		88				<0.2		1.2	
					Bottom	5.5	0.4	340	27.8	27.8	7.9	7.9	17.7	17.7	76.0	76.1	5.4	5.4	10.4		6		90				<0.2		1.2	
						5.5	0.5	313	27.8		7.9		17.7		76.1		5.4		10.5		5		91				<0.2		1.3	
IM6	Fine	Moderate	17:55	6.2	Surface	1.0	0.7	271	29.0	29.0	7.9	7.9	8.3	8.3	91.5	91.5	6.7	6.5	7.8	8.5	5	6	85	88	821076	805820	<0.2	<0.2	1.3	1.2
						1.0	0.8	278	29.0		7.9		8.3		91.4		6.7		7.9		6		85				<0.2		1.2	
					Middle	3.1	0.5	274	28.6	28.6	7.9	7.9	10.2	10.1	85.9	85.9	6.3		8.2		6		87				<0.2		1.3	
						3.1	0.6	299	28.6		7.9		10.1		85.8		6.3		8.2		6		88				<0.2		1.2	
					Bottom	5.2	0.4	268	28.5	28.5	7.9	7.9	10.9	10.9	84.7	84.7	6.2	6.2	9.5		6		90				<0.2		1.2	
						5.2	0.4	268	28.5		7.9		10.9		84.7		6.2		9.5		6		90				<0.2		1.2	
IM7	Fine	Moderate	17:48	7.5	Surface	1.0	0.6	247	29.2	29.2	8.0	8.0	6.5	6.5	94.4	94.4	7.0	7.0	7.9	8.6	5	6	85	87	821329	806841	<0.2	<0.2	1.2	1.3
						1.0	0.6	262	29.2		8.0		6.5		94.4		7.0		7.9		4		84				<0.2		1.3	
					Middle	3.8	0.5	263	29.2	29.2	8.0	8.0	8.4	8.4	95.0	94.9	7.0		7.8		5		87				<0.2		1.3	
						3.8	0.6	284	29.2		8.0		8.4		94.8		7.0		7.7		6		88				<0.2		1.2	
					Bottom	6.5	0.4	261	28.4	28.4	7.9	7.9	12.0	12.0	83.6	83.7	6.1	6.1	10.0		7		89				<0.2		1.3	
						6.5	0.5	281	28.4		7.9		12.0		83.7		6.1		10.2		6		90				<0.2		1.3	
IM8	Cloudy	Moderate	18:06	6.6	Surface	1.0	0.3	230	29.3	29.3	7.8	7.8	6.5	6.5	95.1	95.1	7.0	6.8	7.5	9.7	4	4	86	88	821820	808119	<0.2	<0.2	1.2	1.2
						1.0	0.3	237	29.3		7.8		6.5		95.0		7.0		7.5		3		86				<0.2		1.1	
					Middle	3.3	0.3	246	29.0	29.0	7.8	7.8	8.4	8.4	90.0	89.9	6.6		8.6		4		88				<0.2		1.3	
						3.3	0.4	257	28.9		7.8		8.5		89.7		6.6		9.7		4		89				<0.2		1.2	
					Bottom	5.6	0.3	244	28.0	28.1	7.7	7.7	14.1	14.1	74.3	74.6	5.4	5.4	13.0		5		90				<0.2		1.1	
						5.6	0.3	260	28.1		7.7		14.1		74.9		5.4		12.1		4		90				<0.2		1.2	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 20 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	18:11	6.2	Surface	1.0	0.2	253	29.4	29.4	7.8	7.8	7.3	7.2	94.1	94.0	6.9	6.8	6.7	7.0	4	4	85	88	822110	808787	<0.2	<0.2	1.1	1.2
						1.0	0.2	276	29.4		7.8		7.2		93.9		6.9		6.7		4		86				<0.2		1.2	
					Middle	3.1	0.1	270	28.9	28.9	7.8	7.8	8.0	8.0	90.2	90.0	6.7		6.9		4		87				<0.2		1.2	
						3.1	0.1	280	28.8		7.8		8.1		89.7		6.6		7.1		4		88				<0.2		1.2	
					Bottom	5.2	0.2	266	28.2	28.2	7.8	7.7	11.1	11.5	82.2	80.5	6.1	5.9	7.3		5		90				<0.2		1.2	
						5.2	0.2	278	28.2		7.7		11.8		78.7		5.7		7.4		4		90				<0.2		1.2	
IM10	Cloudy	Moderate	18:17	6.4	Surface	1.0	0.1	255	29.3	29.3	7.8	7.8	7.6	7.6	94.9	94.9	7.0	6.8	10.0	7.8	4	4	86	88	822384	809803	<0.2	<0.2	1.1	1.2
						1.0	0.1	261	29.3		7.8		7.6		94.9		7.0		10.0		4		86				<0.2		1.1	
					Middle	3.2	0.2	298	29.0	29.0	7.8	7.8	9.6	9.6	89.6	89.5	6.5		6.1		4		87				<0.2		1.2	
						3.2	0.2	325	29.0		7.8		9.6		89.4		6.5		6.2		4		88				<0.2		1.2	
					Bottom	5.4	0.3	291	27.9	28.0	7.7	7.7	14.2	14.2	74.9	75.1	5.4	5.5	7.3		5		90				<0.2		1.2	
						5.4	0.3	312	28.0		7.7		14.1		75.3		5.5		7.2		4		89				<0.2		1.2	
IM11	Cloudy	Moderate	18:28	7.4	Surface	1.0	0.3	306	28.6	28.6	7.8	7.8	10.8	10.8	88.3	88.3	6.4	6.1	5.5	8.4	4	4	86	88	822038	811478	<0.2	<0.2	1.2	1.2
						1.0	0.3	316	28.6		7.8		10.8		88.3		6.4		5.5		4		86				<0.2		1.2	
					Middle	3.7	0.5	307	28.5	28.5	7.8	7.8	12.7	12.7	80.6	80.1	5.8		4.9		4		88				<0.2		1.2	
						3.7	0.5	324	28.5		7.8		12.7		79.6		5.8		5.0		4		89				<0.2		1.1	
					Bottom	6.4	0.3	275	27.1	27.1	7.7	7.7	19.4	19.4	65.9	66.1	4.7	4.7	15.0		4		90				<0.2		1.1	
						6.4	0.3	287	27.1		7.7		19.4		66.3		4.7		14.4		4		90				<0.2		1.2	
IM12	Cloudy	Moderate	18:33	8.3	Surface	1.0	0.4	290	28.8	28.8	7.8	7.8	11.2	11.2	91.0	91.1	6.6	6.8	4.8	6.0	3	3	86	88	821439	812035	<0.2	<0.2	1.2	1.2
						1.0	0.4	311	28.8		7.8		11.1		91.1		6.6		4.7		2		86				<0.2		1.2	
					Middle	4.2	0.7	287	28.9	28.9	8.0	8.0	14.1	14.1	98.2	98.1	7.0		4.5		3		88				<0.2		1.2	
						4.2	0.7	300	28.9		8.0		14.0		98.0		7.0		4.6		3		89				<0.2		1.1	
					Bottom	7.3	0.4	291	26.4	26.4	7.7	7.7	23.5	23.5	58.8	58.9	4.2	4.2	8.6		3		90				<0.2		1.2	
						7.3	0.4	310	26.4		7.7		23.5		59.0		4.2		9.0		4		90				<0.2		1.2	
SR1A	Cloudy	Moderate	18:52	5.2	Surface	1.0	-	-	28.9	28.9	8.0	8.0	11.8	11.8	98.5	98.7	7.1	7.1	4.7	5.6	3	3	-	-	819974	812660	-	-	-	-
						1.0	-	-	28.9		8.0		11.8		98.9		7.1		5.0		3		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	28.9	28.9	8.0	8.0	14.1	14.1	102.2	102.1	7.3	7.3	6.0		3		-				-		-	
						4.2	-	-	28.9		8.0		14.1		102.0		7.3		6.5		2		-				-		-	
SR2	Cloudy	Moderate	19:04	4.6	Surface	1.0	0.1	186	29.0	29.0	7.9	7.9	12.2	12.1	94.8	94.5	6.8	6.8	4.9	5.5	4	4	88	89	821481	814186	<0.2	<0.2	1.1	1.2
						1.0	0.1	200	29.0		7.9		11.9		94.1		6.8		5.1		4		89				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	136	27.3	27.4	7.8	7.8	19.2	19.2	69.1	69.6	4.9	5.0	6.0		3		90				<0.2		1.2	
						3.6	0.1	144	27.4		7.8		19.2		70.0		5.0		6.0		4		90				<0.2		1.4	
SR3	Cloudy	Moderate	18:02	8.7	Surface	1.0	0.5	197	29.0	28.9	7.8	7.8	6.5	6.5	91.5	91.2	6.8	6.2	7.6	9.5	4	4	-	-	822143	807565	-	-	-	-
						1.0	0.6	207	28.8		7.8		6.5		90.8		6.8		7.7		4		-				-		-	
					Middle	4.4	0.5	214	28.1	28.1	7.7	7.7	12.0	12.1	75.4	75.4	5.5		8.7		4		-				-		-	
						4.4	0.5	218	28.1		7.7		12.1		75.3		5.5		8.7		4		-				-		-	
					Bottom	7.7	0.3	214	28.0	28.0	7.7	7.7	13.0	13.0	76.1	76.4	5.5	5.6	12.0		4		-				-		-	
						7.7	0.4	224	28.0		7.7		13.0		76.6		5.6		12.6		4		-				-		-	
SR4A	Cloudy	Calm	19:28	9.1	Surface	1.0	0.2	78	28.9	28.9	8.0	8.0	13.6	13.6	100.4	100.5	7.2	7.2	13.5	13.8	14	12	-	-	817208	807796	-	-	-	-
						1.0	0.2	79	28.9		8.0		13.6		100.5		7.2		13.4		13		-				-		-	
					Middle	4.6	0.2	49	28.8	28.8	8.1	8.1	15.4	15.4	100.5	100.5	7.1		11.3		13		-				-		-	
						4.6	0.2	49	28.8		8.1		15.4		100.4		7.1		11.2		13		-				-		-	
					Bottom	8.1	0.1	51	28.2	28.2	8.0	8.0	17.0	17.0	84.2	84.2	6.0	6.0	16.4		10		-				-		-	
						8.1	0.1	53	28.2		8.0		17.1		84.2		6.0		16.7		10		-				-		-	
SR5A	Cloudy	Calm	19:45	3.3	Surface	1.0	0.0	227	29.2	29.2	8.2	8.2	14.5	14.5	114.6	114.6	8.1	8.1	9.7	9.6	12	11	-	-	816615	810699	-	-	-	-
						1.0	0.0	238	29.2		8.2		14.5		114.5		8.1		9.5		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.3	0.1	216	29.2	29.2	8.1	8.1	14.5	14.5	113.6	113.6	8.0	8.0	9.6		11		-				-		-	
						2.3	0.1	235	29.2		8.1		14.5		113.5		8.0		9.6		10		-				-		-	
SR6A	Cloudy	Calm	20:37	3.9	Surface	1.0	0.0	232	29.1	29.1	8.1	8.1	13.0	13.0	112.1	112.2	8.0	8.0	4.9	5.4	3	4	-	-	817969	814737	-	-	-	-
						1.0	0.0	248	29.1		8.1		13.0		112.3		8.0		5.0		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.9	0.0	319	29.1	29.1	8.1	8.1	13.8	13.8	112.8	112.8	8.0	8.0	5.8		4		-				-		-	
						2.9	0.0	331	29.1		8.1		13.8		112.8		8.0		5.7		5		-				-		-	
SR7	Cloudy	Moderate	20:01	16.6	Surface	1.0	0.1	209	27.3	27.1	7.9	7.9	19.3	19.3	81.0	81.0	5.8	5.0	3.2	5.9	3	4	-	-	823651	823744	-	-	-	-
						1.0	0.1	218	26.9		7.9		19.3		81.0		5.8		3.5		4		-				-		-	
					Middle	8.3	0.2	111	25.9	25.9	7.8	7.8	25.7	25.7	59.5	59.5	4.2		5.6		4		-				-		-	
						8.3	0.3	114	25.8		7.8		25.7		59.4		4.2		6.0		4		-				-		-	
					Bottom	15.6	0.2	52	24.9	24.9	7.8	7.8	30.5	30.5	50.9	52.6	3.5	3.7	8.0		4		-				-		-	
						15.6	0.2	56	24.9		7.8		30.5		54.3		3.8		9.0		4		-				-		-	
SR8	Cloudy	Moderate	18:41	4.4	Surface	1.0	-	-	29.3	29.3	7.9	7.9	11.3	11.3	92.1	92.1	6.6	6.6	8.7	10.6	3	4	-	-	820406	811642	-	-	-	-
						1.0	-	-	29.3		7.9		11.3		92.1		6.6		8.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	29.3	29.3	7.9	7.9	12.2	12.2	92.2	92.3	6.6	6.6	12.7		4		-				-		-	
						3.4	-	-	29.2		7.9		12.2		92.3		6.6		12.2		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	13:22	8.2	Surface	1.0	0.3	188	28.6	28.6	8.0	8.0	15.6	15.7	90.0	89.8	6.4	5.7	4.6	6.5	7	7	85	88	815617	804239	<0.2	<0.2	1.0	1.0
						1.0	0.3	205	28.5		8.0		15.7		89.6		6.4		4.6		7		86				<0.2		1.0	
					Middle	4.1	0.4	201	27.5	27.5	8.0	8.0	19.2	19.2	71.2	70.9	5.1		5.3		7		87				<0.2		1.1	
						4.1	0.4	214	27.5		8.0		19.2		70.5		5.0		5.4		7		88				<0.2		1.0	
					Bottom	7.2	0.8	233	24.9	24.9	7.9	7.9	30.1	30.1	41.6	41.8	2.9	2.9	9.4		7		89				<0.2		1.0	
						7.2	0.8	255	24.9		7.9		30.1		42.0		2.9		9.5		6		90				<0.2		1.1	
C2	Sunny	Moderate	12:44	13.0	Surface	1.0	0.4	167	28.4	28.4	7.6	7.6	16.4	16.3	75.8	75.7	5.4	4.8	4.9	5.8	4	5	87	90	825701	806955	<0.2	<0.2	1.1	1.1
						1.0	0.4	181	28.4		7.6		16.3		75.5		5.4		4.9		5		86				<0.2		1.1	
					Middle	6.5	0.6	163	27.4	27.4	7.8	7.8	20.3	20.5	59.0	58.7	4.2		5.8		4		90				<0.2		1.0	
						6.5	0.6	165	27.4		7.8		20.7		58.4		4.1		5.7		4		91				<0.2		1.1	
					Bottom	12.0	0.6	169	25.8	25.8	7.8	7.8	28.5	28.5	58.5	59.1	4.1	4.1	6.7		5		92				<0.2		1.0	
						12.0	0.6	178	25.8		7.8		28.5		59.7		4.1		6.5		5		92				<0.2		1.0	
C3	Sunny	Moderate	14:17	12.1	Surface	1.0	0.1	220	27.5	27.5	7.6	7.6	21.0	21.1	75.6	74.9	5.3	5.0	3.9	4.6	6	5	86	89	822109	817782	<0.2	<0.2	1.0	1.0
						1.0	0.1	227	27.4		7.6		21.2		74.2		5.2		4.1		6		86				<0.2		1.0	
					Middle	6.1	0.1	314	26.7	26.7	7.7	7.7	24.9	24.7	68.1	67.9	4.8		4.5		5		90				<0.2		1.0	
						6.1	0.1	331	26.8		7.7		24.6		67.6		4.7		4.6		5		89				<0.2		1.0	
					Bottom	11.1	0.4	135	25.7	25.7	7.6	7.6	28.4	28.4	61.4	61.5	4.3	4.3	5.2		5		92				<0.2		1.1	
						11.1	0.4	138	25.7		7.6		28.4		61.5		4.3		5.1		4		93				<0.2		1.0	
IM1	Cloudy	Moderate	13:43	5.1	Surface	1.0	0.4	44	28.9	28.9	8.1	8.1	15.8	15.8	96.5	96.2	6.8	6.8	4.1	7.2	5	5	87	88	817966	807123	<0.2	<0.2	0.8	0.9
						1.0	0.5	46	28.9		8.1		15.8		95.8		6.8		4.6		4		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	0.3	12	25.6	25.7	7.9	7.9	26.9	26.9	50.1	50.1	3.5	3.5	10.1		5		87				<0.2		1.0	
						4.1	0.3	12	25.7		7.9		26.9		50.1		3.5		10.1		4		89				<0.2		0.9	
IM2	Cloudy	Moderate	14:49	6.5	Surface	1.0	0.3	299	29.1	29.1	8.2	8.2	15.6	15.6	97.2	96.9	6.9	5.6	3.7	7.0	4	4	86	87	818158	806159	<0.2	<0.2	0.8	0.8
						1.0	0.3	300	29.1		8.2		15.6		96.6		6.8		3.9		4		85				<0.2		0.8	
					Middle	3.3	0.2	270	26.9	27.0	7.9	7.9	21.5	21.4	61.7	61.8	4.4		5.6		4		87				<0.2		0.8	
						3.3	0.2	289	27.0		7.9		21.3		61.8		4.4		5.5		5		87				<0.2		0.8	
					Bottom	5.5	0.2	248	25.3	25.3	7.8	7.8	28.1	28.1	40.0	40.0	2.8	2.8	11.8		4		89				<0.2		0.8	
						5.5	0.2	254	25.3		7.8		28.2		40.0		2.8		11.5		5		89				<0.2		0.8	
IM3	Cloudy	Moderate	14:39	6.9	Surface	1.0	0.2	231	28.6	28.6	8.1	8.1	16.5	16.5	92.8	92.6	6.6	5.5	4.1	8.4	4	5	86	88	818787	805602	<0.2	<0.2	0.8	0.8
						1.0	0.2	251	28.6		8.1		16.5		92.4		6.5		4.3		4		86				<0.2		0.8	
					Middle	3.5	0.3	226	27.3	27.3	7.9	7.9	20.2	20.1	63.7	63.7	4.5		9.2		5		88				<0.2		0.8	
						3.5	0.3	231	27.3		7.9		20.0		63.6		4.5		9.6		5		87				<0.2		0.8	
					Bottom	5.9	0.2	279	25.3	25.3	7.8	7.8	28.1	28.1	40.9	41.0	2.9	2.9	11.7		5		90				<0.2		0.9	
						5.9	0.3	280	25.3		7.8		28.1		41.1		2.9		11.4		6		89				<0.2		0.9	
IM4	Cloudy	Moderate	14:01	8.3	Surface	1.0	1.0	210	29.2	29.2	8.0	8.0	13.7	13.7	85.6	85.3	6.1	5.4	5.8	8.5	4	5	85	87	819704	804614	<0.2	<0.2	1.1	1.1
						1.0	1.1	227	29.2		8.0		13.7		84.9		6.0		6.3		4		86				<0.2		1.1	
					Middle	4.2	0.8	228	27.6	27.6	7.9	7.9	19.0	19.0	66.8	66.7	4.7		9.1		5		87				<0.2		1.1	
						4.2	0.9	243	27.6		7.9		18.9		66.6		4.7		8.9		5		87				<0.2		1.1	
					Bottom	7.3	0.4	231	26.4	26.4	7.9	7.9	23.4	23.4	53.8	53.9	3.8	3.8	10.9		5		89				<0.2		1.2	
						7.3	0.4	237	26.4		7.9		23.4		53.9		3.8		10.1		5		89				<0.2		1.0	
IM5	Cloudy	Moderate	12:58	7.3	Surface	1.0	0.8	234	28.3	28.3	8.0	8.0	16.8	16.8	83.1	82.8	5.9	5.1	5.5	7.3	5	5	86	87	820751	804888	<0.2	<0.2	1.0	1.0
						1.0	0.8	255	28.3		8.0		16.8		82.5		5.9		5.7		5		85				<0.2		1.0	
					Middle	3.7	0.8	241	26.8	26.8	7.9	7.9	22.5	22.2	60.5	60.6	4.3		7.6		4		87				<0.2		1.0	
						3.7	0.8	262	26.8		7.9		21.9		60.7		4.3		7.6		4		87				<0.2		1.0	
					Bottom	6.3	0.5	269	26.1	26.1	7.9	7.9	24.8	24.8	50.0	50.2	3.5	3.6	8.9		4		89				<0.2		0.9	
						6.3	0.6	286	26.1		7.9		24.8		50.3		3.6		9.0		5		90				<0.2		1.0	
IM6	Cloudy	Moderate	12:51	7.3	Surface	1.0	0.6	220	27.6	27.6	7.9	7.9	18.0	18.0	72.1	72.1	5.1	4.9	6.8	8.1	5	4	86	87	821082	805835	<0.2	<0.2	1.0	1.0
						1.0	0.6	240	27.6		7.9		18.1		72.0		5.1		6.9		4		85				<0.2		1.0	
					Middle	3.7	0.7	234	27.2	27.2	7.9	7.9	19.7	19.7	65.0	65.0	4.6		7.9		4		87				<0.2		1.0	
						3.7	0.8	243	27.2		7.9		19.7		64.9		4.6		7.9		3		87				<0.2		0.9	
					Bottom	6.3	0.7	240	26.4	26.4	7.9	7.9	23.8	23.8	55.4	55.8	3.9	4.0	9.8		3		89				<0.2		1.0	
						6.3	0.7	253	26.4		7.9		23.8		56.1		4.0		9.5		4		89				<0.2		1.0	
IM7	Cloudy	Moderate	12:44	8.1	Surface	1.0	0.6	267	28.2	28.2	7.9	7.9	16.3	16.3	78.8	78.7	5.6	5.2	6.3	7.9	6	5	85	87	821353	806822	<0.2	<0.2	1.0	1.0
						1.0	0.6	275	28.1		7.9		16.4		78.5		5.6		6.6		6		86				<0.2		1.1	
					Middle	4.1	0.5	270	27.6	27.6	7.9	7.9	18.5	18.5	67.0	67.0	4.8		8.3		5		87				<0.2		1.0	
						4.1	0.6	273	27.6		7.9		18.5		66.9		4.8		8.3		4		87				<0.2		1.0	
					Bottom	7.1	0.4	242	26.6	26.6	7.9	7.9	22.7	22.7	55.8	56.0	3.9	4.0	9.0		4		89				<0.2		0.9	
						7.1	0.4	255	26.6		7.9		22.7		56.2		4.0		8.7		5		89				<0.2		1.0	
IM8	Sunny	Moderate	13:07	8.1	Surface	1.0	0.1	229	28.4	28.4	7.6	7.6	16.9	16.9	80.8	80.4	5.7	5.4	3.7	5.0	4	5	84	88	821809	808121	<0.2	<0.2	1.0	1.0
						1.0	0.1	241	28.4		7.6		16.8		80.0		5.7		3.8		5		85				<0.2		1.0	
					Middle	4.1	0.2	166	27.7	27.6	7.7	7.7	19.3	19.3	70.4	70.4	5.0		5.6		5		88				<0.2		1.0	
						4.1	0.2	169	27.6		7.7		19.3		70.3		5.0		5.7		5		88				<0.2		1.0	
					Bottom	7.1	0.1	153	27.4	27.4	7.5	7.5	20.7	20.7	75.3	75.5	5.3	5.3	5.6		5		91				<0.2		1.0	
						7.1	0.1	162	27.4		7.5		20.7		75.7		5.3		5.6		5		91				<0.2		1.2	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Sunny	Moderate	13:13	8.0	Surface	1.0	0.3	101	28.5	28.5	7.7	7.7	16.8	16.8	82.9	83.0	5.9	5.8	3.8	5.5	4	4	86	90	822077	808814	<0.2	<0.2	1.0	1.0
						1.0	0.3	108	28.5		7.7		16.8		83.0		5.9		3.8		3		86				<0.2		1.1	
					Middle	4.0	0.4	119	28.3	28.3	7.7	7.7	17.0	17.0	80.3	80.0	5.7		4.8		3		90				<0.2		1.1	
						4.0	0.4	121	28.3		7.7		17.0		79.6		5.6		5.0		4		91				<0.2		1.0	
					Bottom	7.0	0.2	116	27.6	27.6	7.5	7.5	19.9	19.9	77.5	77.7	5.5	5.5	7.7		5		92				<0.2		1.0	
						7.0	0.2	119	27.7		7.5		19.9		77.8		5.5		7.6		5		92				<0.2		1.0	
IM10	Sunny	Moderate	13:19	8.2	Surface	1.0	0.7	100	28.6	28.6	7.7	7.7	16.7	16.7	83.9	83.8	5.9	5.6	4.1	6.7	4	4	86	89	822368	809817	<0.2	<0.2	1.1	1.1
						1.0	0.7	109	28.6		7.7		16.7		83.7		5.9		4.1		4		87				<0.2		1.1	
					Middle	4.1	0.8	112	27.8	27.8	7.7	7.7	18.9	18.9	75.3	75.4	5.3		7.6		5		90				<0.2		1.1	
						4.1	0.8	122	27.8		7.7		18.9		75.4		5.3		7.7		4		90				<0.2		1.0	
					Bottom	7.2	0.6	118	27.6	27.6	7.6	7.6	19.7	19.7	78.1	79.0	5.5	5.6	8.8		4		92				<0.2		1.1	
						7.2	0.7	127	27.7		7.5		19.7		79.8		5.6		8.0		4		91				<0.2		1.1	
IM11	Sunny	Moderate	13:27	8.8	Surface	1.0	0.7	102	28.3	28.3	7.8	7.8	17.2	17.2	79.0	78.8	5.6	5.4	5.9	7.6	7	6	87	90	822078	811452	<0.2	<0.2	1.1	1.0
						1.0	0.7	109	28.3		7.8		17.2		78.6		5.6		6.0		6		86				<0.2		1.1	
					Middle	4.4	0.7	97	28.0	28.0	7.8	7.8	18.2	18.2	72.7	72.2	5.1		7.8		6		89				<0.2		1.0	
						4.4	0.7	106	28.0		7.8		18.2		71.7		5.1		8.0		5		90				<0.2		1.0	
					Bottom	7.8	0.5	109	26.9	26.9	7.8	7.8	23.4	23.4	69.3	69.4	4.9	4.9	8.8		5		92				<0.2		0.9	
						7.8	0.5	116	26.9		7.8		23.4		69.5		4.9		8.8		4		93				<0.2		1.0	
IM12	Sunny	Moderate	13:33	10.2	Surface	1.0	0.6	104	28.6	28.6	7.7	7.7	16.6	16.6	83.5	83.4	5.9	5.5	4.7	6.4	4	5	86	90	821440	812051	<0.2	<0.2	1.0	1.1
						1.0	0.6	112	28.6		7.7		16.6		83.3		5.9		4.8		5		87				<0.2		1.1	
					Middle	5.1	0.6	104	27.9	27.9	7.8	7.8	18.2	18.2	72.2	72.1	5.1		7.1		5		92				<0.2		1.1	
						5.1	0.6	108	27.9		7.8		18.2		72.0		5.1		7.2		5		91				<0.2		1.1	
					Bottom	9.2	0.4	94	27.0	27.0	7.7	7.7	23.3	23.3	69.9	70.0	4.9	4.9	7.3		5		93				<0.2		1.0	
						9.2	0.5	98	27.0		7.7		23.4		70.1		4.9		7.3		4		93				<0.2		1.1	
SR1A	Sunny	Calm	13:50	5.2	Surface	1.0	-	-	29.0	29.0	7.6	7.6	16.7	16.7	96.5	96.5	6.8	6.8	1.8	1.8	4	5	-	-	819982	812666	-	-	-	-
						1.0	-	-	29.0		7.6		16.7		96.5		6.8		1.8		5		-				-		-	
					Middle	2.6	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.6	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	-	-	29.1	29.1	7.4	7.4	17.0	17.0	95.2	95.2	6.7	6.7	1.8		4		-				-		-	
						4.2	-	-	29.1		7.4		17.0		95.2		6.7		1.8		5		-				-		-	
SR2	Sunny	Calm	14:00	5.0	Surface	1.0	0.5	87	28.1	28.1	7.5	7.5	17.5	17.5	81.1	81.0	5.8	5.8	3.6	3.8	4	4	86	87	821467	814162	<0.2	<0.2	1.1	1.1
						1.0	0.5	89	28.1		7.5		17.5		80.9		5.7		3.6		4		85				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.3	77	28.0	28.0	7.2	7.2	18.4	18.4	84.8	85.0	6.0	6.0	3.9		4		89				<0.2		1.1	
						4.0	0.3	77	28.0		7.2		18.4		85.1		6.0		3.9		4		89				<0.2		1.0	
SR3	Sunny	Moderate	13:02	9.9	Surface	1.0	0.1	234	28.7	28.7	7.5	7.5	16.4	16.4	82.3	81.7	5.8	5.3	3.5	5.2	5	5	-	-	822162	807587	-	-	-	-
						1.0	0.1	256	28.7		7.5		16.5		81.1		5.7		3.7		5		-				-		-	
					Middle	5.0	0.2	197	27.6	27.6	7.7	7.7	19.9	19.9	69.2	69.3	4.9		5.7		5		-				-		-	
						5.0	0.2	210	27.6		7.7		19.9		69.3		4.9		5.7		5		-				-		-	
					Bottom	8.9	0.1	208	27.0	27.0	7.7	7.7	21.9	21.9	65.3	65.4	4.6	4.6	6.4		5		-				-		-	
						8.9	0.1	226	27.0		7.7		21.9		65.5		4.6		6.3		5		-				-		-	
SR4A	Cloudy	Moderate	15:03	8.2	Surface	1.0	0.1	264	28.9	28.9	8.1	8.1	16.1	16.1	92.4	91.9	6.5	4.9	4.6	9.3	7	8	-	-	817177	807827	-	-	-	-
						1.0	0.1	274	28.9		8.1		16.1		91.3		6.4		5.0		8		-				-		-	
					Middle	4.1	0.1	271	26.1	26.1	7.9	7.9	25.3	25.2	46.8	46.8	3.3		9.7		8		-				-		-	
						4.1	0.1	297	26.1		7.9		25.2		46.8		3.3		9.7		8		-				-		-	
					Bottom	7.2	0.0	123	25.4	25.4	7.9	7.9	27.9	27.9	41.6	41.7	2.9	2.9	13.5		9		-				-		-	
						7.2	0.0	134	25.4		7.9		27.9		41.8		2.9		13.6		8		-				-		-	
SR5A	Cloudy	Moderate	15:21	4.5	Surface	1.0	0.1	204	28.6	28.5	8.0	8.0	16.6	16.7	104.1	103.7	7.4	7.4	5.9	6.5	7	7	-	-	816592	810696	-	-	-	-
						1.0	0.1	212	28.4		8.0		16.7		103.3		7.3		6.0		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	199	28.1	28.2	8.0	8.0	18.2	18.2	81.4	81.6	5.8	5.8	7.1		8		-				-		-	
						3.5	0.0	216	28.2		8.0		18.2		81.8		5.8		7.2		7		-				-		-	
SR6A	Cloudy	Moderate	15:51	3.8	Surface	1.0	0.3	32	28.7	28.6	8.0	8.0	17.0	17.0	95.6	95.3	6.7	6.7	9.8	10.8	7	6	-	-	817939	814751	-	-	-	-
						1.0	0.3	33	28.5		8.0		17.0		95.0		6.7		10.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	180	27.7	27.7	7.8	7.8	19.8	19.8	78.0	78.1	5.5	5.5	11.6		6		-				-		-	
						2.8	0.2	190	27.7		7.8		19.7		78.2		5.5		11.6		5		-				-		-	
SR7	Sunny	Calm	14:45	18.4	Surface	1.0	0.6	105	28.9	28.9	7.6	7.6	16.8	16.8	101.4	101.4	7.1	6.8	1.4	3.1	6	5	-	-	823644	823750	-	-	-	-
						1.0	0.6	105	28.9		7.6		16.8		101.3		7.1		1.5		5		-				-		-	
					Middle	9.2	0.4	107	28.3	28.3	7.7	7.7	18.9	18.9	92.5	92.5	6.5		2.6		4		-				-		-	
						9.2	0.4	110	28.3		7.7		18.9		92.4		6.5		2.8		4		-				-		-	
					Bottom	17.4	0.3	139	28.1	28.1	7.7	7.7	19.5	19.5	91.7	91.7	6.4	6.4	5.3		4		-				-		-	
						17.4	0.3	149	28.1		7.7		19.5		91.7		6.4		5.1		4		-				-		-	
SR8	Sunny	Calm	13:41	5.3	Surface	1.0	-	-	29.3	29.2	7.6	7.6	16.4	16.3	91.8	91.7	6.4	6.4	7.6	8.3	8	8	-	-	820405	811612	-	-	-	-
						1.0	-	-	29.2		7.6		16.3		91.6		6.4		7.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	28.8	28.8	7.5	7.5	17.3	17.3	89.5	89.5	6.3	6.3	8.8		7		-				-		-	
						4.3	-	-	28.8		7.5		17.3		89.4		6.3		8.9		8		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	07:52	8.5	Surface	1.0	0.7	33	27.8	27.8	8.0	8.0	15.5	15.3	76.5	76.3	5.5	4.8	7.1	8.2	4	5	85	87	815608	804260	<0.2	<0.2	1.1	1.1
						1.0	0.7	35	27.8		8.0		15.1		76.0		5.5		7.2		5		86				<0.2		1.0	
					Middle	4.3	0.6	31	26.7	26.8	8.0	7.9	22.1	22.0	56.3	56.1	4.0		8.7		5		87				<0.2		1.0	
						4.3	0.6	32	26.8		7.9		21.9		55.9		4.0		8.9		5		87				<0.2		1.2	
					Bottom	7.5	0.2	46	25.0	25.0	7.9	7.9	29.6	29.6	44.9	45.2	3.1	3.2	8.6		6		89				<0.2		1.0	
						7.5	0.2	48	25.0		7.9		29.6		45.4		3.2		9.0		6		89				<0.2		1.0	
C2	Fine	Moderate	08:17	13.2	Surface	1.0	0.6	2	28.8	28.8	7.8	7.8	12.8	12.8	85.4	85.1	6.2	5.6	3.2	4.2	3	3	83	87	825678	806931	<0.2	<0.2	0.9	1.0
						1.0	0.6	2	28.8		7.8		12.8		84.7		6.1		3.0		3		83				<0.2		1.0	
					Middle	6.6	0.5	340	28.0	28.0	7.8	7.8	18.1	18.1	70.2	70.2	5.0		4.5		4		87				<0.2		1.0	
						6.6	0.6	313	28.0		7.8		18.1		70.2		5.0		4.6		3		87				<0.2		1.0	
					Bottom	12.2	0.4	339	27.1	27.1	7.8	7.8	23.3	23.4	68.7	68.9	4.8	4.8	5.1		3		92				<0.2		1.0	
						12.2	0.5	312	27.1		7.8		23.4		69.1		4.8		4.9		4		91				<0.2		1.0	
C3	Fine	Moderate	06:36	12.2	Surface	1.0	0.5	264	28.5	28.5	8.1	8.1	14.1	14.1	81.6	81.1	5.9	5.3	1.7	2.0	3	3	82	87	822129	817794	<0.2	<0.2	0.9	0.9
						1.0	0.5	267	28.5		8.1		14.1		80.6		5.8		1.7		3		83				<0.2		0.9	
					Middle	6.1	0.5	247	27.4	27.4	8.1	8.1	21.6	21.6	68.9	66.9	4.8		1.6		2		88				<0.2		0.9	
						6.1	0.5	265	27.4		8.1		21.7		64.9		4.6		1.7		4		87				<0.2		0.8	
					Bottom	11.2	0.4	285	25.9	25.9	8.1	8.1	27.8	27.8	59.7	59.7	4.2	4.2	2.5		4		91				<0.2		0.8	
						11.2	0.4	304	25.9		8.1		27.8		59.7		4.2		2.6		3		91				<0.2		0.9	
IM1	Cloudy	Moderate	08:09	5.5	Surface	1.0	0.1	6	28.0	28.0	8.1	8.1	16.7	16.7	81.9	81.7	5.8	5.8	7.6	9.8	6	6	86	87	817963	807110	<0.2	<0.2	1.0	1.0
						1.0	0.1	6	28.0		8.1		16.7		81.4		5.8		8.1		7		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	0.1	210	27.9	27.9	8.1	8.1	17.4	17.4	79.4	79.4	5.7	5.7	12.0		5		87				<0.2		1.0	
						4.5	0.1	217	27.8		8.1		17.4		79.4		5.7		11.4		6		88				<0.2		1.0	
IM2	Cloudy	Moderate	08:15	7.2	Surface	1.0	0.6	326	27.9	27.9	8.0	8.0	15.4	15.4	81.5	81.5	5.9	5.8	4.9	7.1	7	7	86	87	818140	806176	<0.2	<0.2	1.0	1.0
						1.0	0.7	354	27.9		8.0		15.4		81.4		5.9		4.9		7		85				<0.2		1.0	
					Middle	3.6	0.5	311	27.9	27.9	8.1	8.1	16.4	16.4	78.7	78.6	5.6		5.1		6		87				<0.2		1.0	
						3.6	0.6	321	27.9		8.1		16.4		78.4		5.6		5.8		8		87				<0.2		1.0	
					Bottom	6.2	0.5	309	26.5	26.5	8.0	8.0	20.8	21.0	61.3	60.1	4.4	4.3	10.5		8		89				<0.2		1.0	
						6.2	0.6	319	26.4		8.0		21.2		58.9		4.2		11.1		7		89				<0.2		1.0	
IM3	Cloudy	Moderate	08:21	6.9	Surface	1.0	0.7	298	27.9	27.9	8.0	8.0	15.1	15.1	81.1	81.0	5.8	5.6	4.9	6.3	7	7	85	87	818777	805580	<0.2	<0.2	1.0	1.0
						1.0	0.7	318	27.9		8.0		15.1		80.9		5.8		4.9		6		86				<0.2		1.1	
					Middle	3.5	0.6	300	27.2	27.2	8.0	8.0	16.3	16.3	73.6	73.2	5.3		6.4		7		87				<0.2		0.9	
						3.5	0.6	310	27.1		8.0		16.3		72.7		5.3		6.7		7		87				<0.2		1.0	
					Bottom	5.9	0.5	276	26.7	26.7	8.0	8.0	22.9	23.0	59.2	59.3	4.2	4.2	7.6		7		90				<0.2		0.9	
						5.9	0.5	277	26.7		8.0		23.0		59.3		4.2		7.5		6		89				<0.2		1.0	
IM4	Cloudy	Moderate	08:29	7.6	Surface	1.0	0.6	312	27.8	27.8	8.0	8.0	15.7	15.7	77.2	77.1	5.6	5.3	5.9	8.4	7	6	85	87	819729	804612	<0.2	<0.2	1.0	1.0
						1.0	0.7	339	27.7		8.0		15.7		76.9		5.5		6.1		6		86				<0.2		1.0	
					Middle	3.8	0.5	299	27.6	27.6	8.0	8.0	17.1	17.1	70.1	69.9	5.0		6.7		6		87				<0.2		1.0	
						3.8	0.6	315	27.6		8.0		17.1		69.7		5.0		6.6		6		87				<0.2		0.9	
					Bottom	6.6	0.1	288	26.4	26.4	8.0	8.0	23.9	23.9	54.7	54.8	3.9	3.9	12.6		6		90				<0.2		0.9	
						6.6	0.1	314	26.3		8.0		23.9		54.8		3.9		12.2		6		89				<0.2		1.0	
IM5	Cloudy	Moderate	08:34	6.2	Surface	1.0	0.5	284	27.9	27.9	8.0	8.0	15.6	15.6	79.8	79.7	5.7	5.7	5.0	5.3	7	8	86	87	820756	804876	<0.2	<0.2	1.0	1.0
						1.0	0.5	297	27.9		8.0		15.6		79.6		5.7		5.0		7		85				<0.2		1.0	
					Middle	3.1	0.5	280	27.8	27.8	8.0	8.0	15.9	15.9	77.8	77.7	5.6		5.2		8		87				<0.2		1.0	
						3.1	0.6	280	27.8		8.0		15.9		77.5		5.6		5.2		7		86				<0.2		1.0	
					Bottom	5.2	0.4	262	27.0	27.1	8.0	8.0	20.1	20.2	66.2	66.3	4.7	4.7	5.5		9		89				<0.2		1.0	
						5.2	0.4	279	27.1		8.0		20.3		66.3		4.7		5.7		8		89				<0.2		1.0	
IM6	Cloudy	Moderate	08:40	7.8	Surface	1.0	0.8	281	28.1	28.1	8.1	8.0	15.1	15.1	81.0	81.0	5.8	5.6	6.0	7.1	6	7	85	87	821056	805837	<0.2	<0.2	1.0	1.0
						1.0	0.8	289	28.0		8.0		15.1		80.9		5.8		6.4		6		86				<0.2		1.0	
					Middle	3.9	0.5	286	27.9	27.9	8.0	8.0	16.3	16.3	76.3	76.2	5.5		7.6		6		86				<0.2		0.9	
						3.9	0.6	310	27.9		8.0		16.3		76.0		5.4		7.7		7		87				<0.2		1.0	
					Bottom	6.8	0.3	274	26.6	26.6	8.0	8.0	21.5	21.7	61.7	61.9	4.4	4.4	7.3		7		89				<0.2		1.0	
						6.8	0.3	299	26.6		8.0		21.8		62.0		4.4		7.6		8		89				<0.2		0.9	
IM7	Cloudy	Moderate	08:47	8.2	Surface	1.0	0.2	268	28.1	28.1	8.0	8.0	15.1	15.0	78.3	78.1	5.6	5.6	5.6	6.9	7	6	86	87	821362	806830	<0.2	<0.2	0.9	1.0
						1.0	0.2	268	28.1		8.0		15.0		77.9		5.6		5.8		7		85				<0.2		1.0	
					Middle	4.1	0.6	274	27.8	27.7	8.0	8.0	16.0	16.0	77.3	77.2	5.6		6.1		7		88				<0.2		1.0	
						4.1	0.7	275	27.6		8.0		16.1		77.0		5.6		6.1		6		87				<0.2		1.0	
					Bottom	7.2	0.4	251	26.9	26.9	8.0	8.0	21.3	21.5	61.7	61.4	4.4	4.4	8.7		5		89				<0.2		0.9	
						7.2	0.4	263	26.8		8.0		21.7		61.1		4.3		8.9		5		89				<0.2		1.0	
IM8	Fine	Moderate	07:53	8.2	Surface	1.0	0.1	298	28.4	28.4	7.8	7.8	14.0	14.0	80.3	79.9	5.8	5.6	4.6	5.8	6	7	84	88	821838	808130	<0.2	<0.2	0.9	0.9
						1.0	0.1	306	28.4		7.8		14.0		79.5		5.7		5.0		6		85				<0.2		1.0	
					Middle	4.1	0.2	271	28.3	28.3	7.8	7.8	15.6	15.6	76.7	76.7	5.5		6.4		7		88				<0.2		0.9	
						4.1	0.2	292	28.3		7.8		15.6		76.6		5.5		6.4		7		89				<0.2		0.9	
					Bottom	7.2	0.1	204	28.1	28.1	7.7	7.7	16.7	16.7	78.1	78.1	5.6	5.6	6.3		7		89				<0.2		1.0	
						7.2	0.1	208	28.1		7.7		16.7		78.1		5.6		6.3		6		90				<0.2		0.9	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 23 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Fine	Moderate	07:47	8.0	Surface	1.0	0.3	263	28.3	28.3	7.8	7.8	15.2	15.2	75.7	75.6	5.4	5.4	9.2	10.4	9	7	84	88	822093	808825	<0.2	<0.2	1.0	0.9
						1.0	0.3	280	28.2		7.8		15.2		75.4		5.4		9.8		8		85				<0.2		0.9	
					Middle	4.0	0.3	258	28.2	28.2	7.8	7.8	17.0	17.0	75.3	75.3	5.4		11.5		6		88				<0.2		0.9	
						4.0	0.3	283	28.2		7.8		17.0		75.2		5.3		11.3		6		89				<0.2		0.9	
					Bottom	7.0	0.3	272	28.2	28.2	7.7	7.7	17.0	17.0	75.8	75.9	5.4	5.4	10.3		7		92				<0.2		0.9	
						7.0	0.3	287	28.2		7.7		17.0		76.0		5.4		10.1		6		92				<0.2		0.9	
IM10	Fine	Moderate	07:41	9.5	Surface	1.0	0.7	311	28.3	28.3	7.9	7.9	14.6	14.6	76.5	76.0	5.5	5.1	5.9	6.6	5	5	83	87	822400	809790	<0.2	<0.2	0.9	0.9
						1.0	0.7	325	28.3		7.9		14.6		75.4		5.4		5.8		5		83				<0.2		0.9	
					Middle	4.8	0.7	301	27.6	27.6	7.9	7.9	19.6	19.6	67.5	67.4	4.8		6.8		5		87				<0.2		0.9	
						4.8	0.7	314	27.6		7.9		19.6		67.3		4.8		6.9		6		88				<0.2		0.9	
					Bottom	8.5	0.5	282	27.3	27.3	7.8	7.8	21.5	21.5	67.1	67.5	4.7	4.8	7.1		5		92				<0.2		0.9	
						8.5	0.5	283	27.3		7.8		21.5		67.9		4.8		7.2		6		91				<0.2		0.9	
IM11	Fine	Moderate	07:31	8.6	Surface	1.0	0.6	294	28.3	28.3	7.9	7.9	14.5	14.6	76.6	76.5	5.5	5.4	3.4	4.6	4	4	82	88	822066	811460	<0.2	<0.2	1.0	0.9
						1.0	0.6	307	28.3		7.9		14.7		76.4		5.5		3.4		4		83				<0.2		1.0	
					Middle	4.3	0.6	290	28.2	28.2	7.9	7.9	16.9	16.9	74.8	74.7	5.3		3.8		5		88				<0.2		0.9	
						4.3	0.6	316	28.2		7.9		16.9		74.5		5.3		3.9		4		90				<0.2		0.9	
					Bottom	7.6	0.4	285	27.0	27.1	7.9	7.8	22.8	22.8	68.7	69.6	4.8	4.9	6.6		5		90				<0.2		0.8	
						7.6	0.4	298	27.1		7.8		22.7		70.5		4.9		6.2		4		92				<0.2		0.9	
IM12	Fine	Moderate	07:25	9.1	Surface	1.0	0.6	279	28.4	28.4	7.9	7.9	15.2	15.2	83.7	83.8	6.0	5.8	3.1	5.2	4	5	84	88	821481	812030	<0.2	<0.2	1.0	0.9
						1.0	0.7	288	28.4		7.9		15.2		83.9		6.0		3.0		5		84				<0.2		0.9	
					Middle	4.6	0.7	285	28.4	28.4	7.9	7.9	16.6	16.6	79.5	79.1	5.6		4.0		5		87				<0.2		0.8	
						4.6	0.8	295	28.4		7.9		16.6		78.7		5.6		4.2		6		88				<0.2		0.9	
					Bottom	8.1	0.5	281	26.5	26.5	7.8	7.8	25.5	25.5	68.1	69.2	4.8	4.9	7.9		6		92				<0.2		0.8	
						8.1	0.5	289	26.4		7.8		25.6		70.2		4.9		8.7		6		91				<0.2		0.9	
SR1A	Fine	Calm	07:08	5.4	Surface	1.0	-	-	28.5	28.5	7.8	7.8	14.4	14.4	84.2	84.2	6.0	6.0	2.5	2.9	2	3	-	-	819972	812657	-	-	-	-
						1.0	-	-	28.5		7.8		14.4		84.2		6.0		2.5		3		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.4	-	-	28.5	28.5	7.7	7.7	15.8	15.8	85.4	85.5	6.1	6.1	3.3		4		-				-		-	
						4.4	-	-	28.5		7.7		15.8		85.5		6.1		3.3		4		-				-		-	
SR2	Fine	Moderate	06:56	5.0	Surface	1.0	0.1	105	28.1	28.1	7.8	7.8	15.0	14.9	75.0	74.9	5.4	5.4	4.3	4.4	3	4	85	86	821484	814163	<0.2	<0.2	1.0	0.9
						1.0	0.1	113	28.1		7.8		14.9		74.8		5.4		4.4		4		85				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	88	27.6	27.6	7.7	7.7	20.0	20.0	76.3	76.5	5.4	5.4	4.5		3		87				<0.2		0.9	
						4.0	0.1	94	27.6		7.7		20.0		76.7		5.4		4.4		4		87				<0.2		0.9	
SR3	Fine	Moderate	07:58	9.6	Surface	1.0	0.2	273	28.4	28.4	7.9	7.9	13.8	13.8	80.4	80.2	5.8	5.6	2.9	4.1	7	6	-	-	822166	807594	-	-	-	-
						1.0	0.2	279	28.4		7.9		13.8		79.9		5.8		3.0		6		-				-		-	
					Middle	4.8	0.1	267	28.3	28.3	7.8	7.8	15.8	15.8	75.9	75.8	5.4		3.8		6		-				-		-	
						4.8	0.1	271	28.3		7.8		15.8		75.6		5.4		4.0		5		-				-		-	
					Bottom	8.6	0.0	29	27.7	27.7	7.8	7.8	19.0	19.0	72.6	72.7	5.1	5.2	5.5		5		-				-		-	
						8.6	0.0	29	27.7		7.8		19.0		72.8		5.2		5.5		6		-				-		-	
SR4A	Cloudy	Moderate	07:29	8.6	Surface	1.0	0.2	65	28.1	28.1	8.0	8.0	15.9	15.9	76.6	76.4	5.5	4.9	6.3	8.2	6	7	-	-	817193	807823	-	-	-	-
						1.0	0.2	67	28.1		8.0		15.9		76.2		5.5		6.6		7		-				-		-	
					Middle	4.3	0.1	221	27.2	27.2	7.9	7.9	20.6	20.6	59.8	59.8	4.2		8.8		7		-				-		-	
						4.3	0.1	221	27.1		7.9		20.6		59.7		4.2		8.8		6		-				-		-	
					Bottom	7.6	0.1	261	26.2	26.2	7.9	7.9	24.9	25.0	51.6	51.7	3.6	3.6	9.4		7		-				-		-	
						7.6	0.1	275	26.1		7.9		25.0		51.8		3.6		9.5		6		-				-		-	
SR5A	Cloudy	Moderate	07:14	4.2	Surface	1.0	0.1	267	28.5	28.5	8.0	8.0	16.5	16.5	95.5	95.5	6.8	6.8	7.1	8.8	7	7	-	-	816614	810707	-	-	-	-
						1.0	0.1	286	28.5		8.0		16.5		95.5		6.8		7.6		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.2	0.2	340	28.6	28.6	7.9	7.9	16.7	16.7	96.3	96.5	6.8	6.8	10.1		7		-				-		-	
						3.2	0.2	350	28.5		7.9		16.8		96.6		6.8		10.4		7		-				-		-	
SR6A	Cloudy	Moderate	06:49	4.5	Surface	1.0	0.0	239	28.4	28.4	7.8	7.8	14.8	14.9	88.6	88.7	6.3	6.4	4.1	4.0	7	7	-	-	817986	814745	-	-	-	-
						1.0	0.0	244	28.4		7.8		14.9		88.7		6.4		4.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.5	0.0	325	28.4	28.4	7.8	7.8	15.2	15.2	89.9	90.0	6.4	6.4	3.8		7		-				-		-	
						3.5	0.0	355	28.4		7.8		15.2		90.0		6.4		4.2		7		-				-		-	
SR7	Fine	Moderate	06:06	20.0	Surface	1.0	0.2	216	28.5	28.5	8.1	8.1	15.7	15.7	83.0	82.7	6.0	5.0	1.2	1.5	3	4	-	-	823616	823755	-	-	-	-
						1.0	0.2	234	28.5		8.2		15.7		82.3		6.0		1.2		4		-				-		-	
					Middle	10.0	0.1	20	25.9	25.9	8.3	8.3	27.7	27.7	54.9	54.9	4.0		1.3		4		-				-		-	
						10.0	0.1	21	25.9		8.3		27.7		54.8		4.0		1.3		4		-				-		-	
					Bottom	19.0	0.4	293	24.9	24.9	8.4	8.4	31.2	31.2	50.2	50.3	3.5	3.5	1.9		5		-				-		-	
						19.0	0.4	304	24.9		8.4		31.2		50.4		3.5		2.0		5		-				-		-	
SR8	Fine	Calm	07:16	5.1	Surface	1.0	-	-	28.5	28.5	7.8	7.8	14.6	14.6	81.7	81.6	5.8	5.8	4.2	4.5	8	8	-	-	820403	811620	-	-	-	-
						1.0	-	-	28.5		7.8		14.6		81.5		5.8		4.3		8		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-	-			-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.1	-	-	28.3	28.3	7.7	7.7	16.3	16.3	81.4	81.7	5.8	5.8	4.6		9		-				-		-	
						4.1	-	-	28.3		7.7		16.3		82.0		5.8		4.7		8		-				-		-	

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Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
C1	Fine	Rough	15:25	8.2	Surface	1.0	0.4	213	28.6	28.6	8.1	8.1	17.6	17.6	100.7	100.6	7.1	6.7	3.1	4.0	2	4	85	88	815623	804241	<0.2	<0.2	0.8	0.8
						1.0	0.4	221	28.6		8.1		17.6		100.5		7.1		3.1		3		85				<0.2		0.8	
					Middle	4.1	0.5	205	28.2	28.2	8.0	8.0	18.2	18.3	89.8	89.7	6.3		3.4		5		87				<0.2		0.8	
						4.1	0.5	215	28.2		8.0		18.3		89.5		6.3		3.4		4		88				<0.2		0.7	
					Bottom	7.2	0.7	193	25.4	25.4	7.8	7.8	28.1	28.2	41.8	41.8	2.9	2.9	5.6		5		91				<0.2		0.8	
						7.2	0.8	197	25.3		7.8		28.2		41.7		2.9		5.5		4		90				<0.2		0.9	
C2	Sunny	Moderate	14:11	11.4	Surface	1.0	0.2	135	28.7	28.7	7.8	7.8	16.5	16.5	87.3	87.3	6.2	5.6	3.5	4.0	4	5	80	83	825659	806939	<0.2	<0.2	1.0	1.0
						1.0	0.2	147	28.7		7.8		16.5		87.3		6.2		3.5		4		79				<0.2		1.0	
					Middle	5.7	0.5	154	27.5	27.6	7.7	7.7	20.2	20.2	69.1	69.2	4.9		3.8		5		83				<0.2		1.0	
						5.7	0.5	156	27.6		7.7		20.1		69.3		4.9		3.7		4		83				<0.2		1.0	
					Bottom	10.4	0.5	144	26.5	26.5	7.7	7.7	24.4	24.6	61.3	61.2	4.3	4.3	4.8		7		88				<0.2		1.0	
						10.4	0.5	147	26.5		7.7		24.7		61.1		4.3		4.8		6		87				<0.2		1.0	
C3	Sunny	Moderate	15:59	10.2	Surface	1.0	0.4	286	28.1	28.1	7.9	7.9	19.8	19.8	94.3	94.2	6.6	5.9	1.9	3.4	6	5	80	84	822087	817794	<0.2	<0.2	0.8	0.8
						1.0	0.4	288	28.1		7.9		19.8		94.1		6.6		1.9		6		81				<0.2		0.9	
					Middle	5.1	0.2	257	27.3	27.3	7.8	7.8	21.8	21.8	73.6	73.7	5.2		3.6		4		84				<0.2		0.8	
						5.1	0.2	274	27.3		7.8		21.8		73.8		5.2		3.6		6		84				<0.2		0.8	
					Bottom	9.2	0.1	120	25.6	25.6	7.7	7.7	27.8	27.8	55.3	55.3	3.9	3.9	4.7		4		88				<0.2		0.8	
						9.2	0.1	125	25.6		7.7		27.8		55.3		3.9		4.7		5		88				<0.2		0.8	
IM1	Fine	Rough	15:01	5.3	Surface	1.0	0.1	134	28.5	28.5	8.1	8.1	17.1	17.1	103.0	103.0	7.3	7.3	3.3	5.1	5	4	86	87	817965	807143	<0.2	<0.2	0.8	0.8
						1.0	0.1	147	28.5		8.1		17.1		102.9		7.3		3.3		4		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	0.1	311	26.2	26.2	7.8	7.8	25.0	25.0	49.0	49.0	3.4	3.4	6.9		4		88				<0.2		0.8	
						4.3	0.1	331	26.2		7.8		25.0		48.9		3.4		7.0		3		89				<0.2		0.8	
IM2	Fine	Rough	14:52	7.3	Surface	1.0	0.1	199	28.5	28.5	8.1	8.1	17.3	17.3	103.3	103.2	7.3	6.1	3.5	6.0	4	4	84	87	818158	806181	<0.2	<0.2	0.8	0.9
						1.0	0.1	216	28.5		8.1		17.3		103.1		7.3		3.5		5		84				<0.2		0.8	
					Middle	3.7	0.2	161	27.2	27.2	7.9	7.9	21.2	21.3	69.9	69.9	4.9		6.3		5		87				<0.2		1.0	
						3.7	0.2	170	27.2		7.9		21.3		69.8		4.9		6.3		4		87				<0.2		0.9	
					Bottom	6.3	0.2	114	25.6	25.6	7.8	7.8	27.2	27.2	44.6	44.7	3.1	3.1	8.1		4		89				<0.2		0.8	
						6.3	0.2	117	25.6		7.8		27.2		44.7		3.1		8.2		4		89				<0.2		0.8	
IM3	Fine	Rough	14:44	7.5	Surface	1.0	0.1	345	28.5	28.5	8.1	8.1	17.3	17.3	98.4	98.4	6.9	5.9	3.6	7.2	5	5	84	87	818786	805616	<0.2	<0.2	0.9	0.8
						1.0	0.1	351	28.5		8.1		17.3		98.3		6.9		3.5		4		84				<0.2		0.8	
					Middle	3.8	0.1	81	27.3	27.3	7.9	7.9	22.4	22.2	68.3	68.3	4.8		8.1		5		87				<0.2		0.8	
						3.8	0.1	87	27.3		7.9		22.0		68.3		4.8		7.9		4		87				<0.2		0.8	
					Bottom	6.5	0.3	106	26.1	26.1	7.9	7.9	25.4	25.4	50.8	50.9	3.6	3.6	10.1		5		89				<0.2		0.8	
						6.5	0.3	108	26.1		7.9		25.4		50.9		3.6		10.1		6		89				<0.2		0.8	
IM4	Fine	Rough	14:34	8.6	Surface	1.0	0.9	195	27.8	27.8	8.0	8.0	19.2	19.2	81.9	81.9	5.8	5.6	4.8	6.0	5	6	84	87	819732	804593	<0.2	<0.2	0.9	0.9
						1.0	0.9	213	27.8		8.0		19.2		81.9		5.8		4.7		6		84				<0.2		0.9	
					Middle	4.3	0.7	188	27.4	27.4	7.9	7.9	20.5	20.5	75.2	75.2	5.3		5.6		6		87				<0.2		0.9	
						4.3	0.7	191	27.4		7.9		20.5		75.1		5.3		5.6		7		88				<0.2		0.9	
					Bottom	7.6	0.4	170	26.0	26.0	7.9	7.9	25.7	25.7	50.9	51.0	3.6	3.6	7.8		6		89				<0.2		0.8	
						7.6	0.4	184	26.0		7.9		25.7		51.0		3.6		7.6		7		89				<0.2		0.9	
IM5	Fine	Rough	14:25	8.1	Surface	1.0	0.7	216	28.4	28.4	8.0	8.0	17.6	17.6	92.5	92.5	6.5	6.1	3.8	6.8	4	5	84	87	820719	804867	<0.2	<0.2	0.9	0.9
						1.0	0.7	228	28.4		8.0		17.6		92.4		6.5		3.8		5		85				<0.2		0.9	
					Middle	4.1	0.7	201	28.0	28.0	7.9	7.9	18.4	18.4	78.8	78.7	5.6		7.3		6		87				<0.2		0.9	
						4.1	0.7	220	28.0		7.9		18.4		78.6		5.6		7.4		5		87				<0.2		0.9	
					Bottom	7.1	0.4	183	26.0	26.0	7.9	7.9	25.5	25.5	51.4	51.5	3.6	3.6	9.4		6		89				<0.2		0.9	
						7.1	0.4	185	26.0		7.9		25.5		51.5		3.6		9.1		5		89				<0.2		0.9	
IM6	Fine	Rough	14:17	7.8	Surface	1.0	0.5	243	28.0	28.0	7.9	7.9	18.1	18.1	82.4	82.5	5.8	5.7	5.9	7.2	8	8	84	87	821061	805833	<0.2	<0.2	0.9	0.9
						1.0	0.5	247	28.0		7.9		18.1		82.5		5.8		5.9		8		85				<0.2		0.9	
					Middle	3.9	0.5	231	27.7	27.7	7.9	7.9	19.0	19.0	78.2	78.2	5.5		6.0		7		87				<0.2		0.9	
						3.9	0.5	249	27.7		7.9		19.0		78.2		5.5		6.1		8		88				<0.2		0.9	
					Bottom	6.8	0.3	199	26.6	26.6	7.9	7.9	23.5	23.5	58.9	59.0	4.2	4.2	9.7		8		89				<0.2		0.9	
						6.8	0.3	217	26.6		7.9		23.5		59.0		4.2		9.8		7		89				<0.2		0.9	
IM7	Fine	Rough	14:12	9.0	Surface	1.0	0.2	275	28.3	28.3	8.0	8.0	17.3	17.3	86.0	86.0	6.1	5.6	5.1	9.7	7	7	84	86	821361	806819	<0.2	<0.2	0.9	0.9
						1.0	0.2	275	28.3		8.0		17.3		86.0		6.1		5.1		7		83				<0.2		0.9	
					Middle	4.5	0.2	216	27.6	27.6	7.9	7.9	19.6	19.6	70.3	70.3	5.0		10.0		7		87				<0.2		0.8	
						4.5	0.2	235	27.6		7.9		19.6		70.3		5.0		10.1		6		87				<0.2		0.9	
					Bottom	8.0	0.3	163	27.0	27.0	8.0	8.0	21.8	21.8	64.9	65.0	4.6	4.6	14.0		6		88				<0.2		0.9	
						8.0	0.3	166	27.0		8.0		21.8		65.1		4.6		13.9		7		89				<0.2		0.9	
IM8	Sunny	Moderate	14:37	8.2	Surface	1.0	0.2	29	28.6	28.6	7.8	7.8	16.8	16.8	89.7	89.7	6.3	5.9	2.7	4.8	5	5	81	84	821835	808130	<0.2	<0.2	0.9	0.9
						1.0	0.2	29	28.6		7.8		16.8		89.7		6.3		2.7		5		80				<0.2		0.9	
					Middle	4.1	0.1	135	27.9	27.9	7.8	7.8	18.8	18.8	76.3	76.1	5.4		3.8		5		84				<0.2		0.9	
						4.1	0.1	143	27.8		7.8		18.8		75.8		5.4		3.8		5		85				<0.2		1.0	
					Bottom	7.2	0.1	161	27.4	27.4	7.7	7.7	20.2	20.2	68.6	68.6	4.9	4.9	8.0		4		88				<0.2		1.0	
						7.2	0.1	169	27.4		7.7		20.2		68.6		4.8		8.0		5		88				<0.2		0.9	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	14:43	7.5	Surface	1.0	0.2	82	28.6	28.6	7.8	7.8	17.1	17.1	90.7	90.7	6.4	6.3	2.5	5.9	3	4	80	84	822083	808809	<0.2	<0.2	0.9	0.9
						1.0	0.3	82	28.6		7.8		17.1		90.7		6.4		2.5		4		80				<0.2		0.9	
					Middle	3.8	0.4	117	28.4	28.4	7.8	7.8	17.4	17.4	87.5	87.4	6.2		2.9		4		84				<0.2		0.9	
						3.8	0.4	119	28.4		7.8		17.4		87.3		6.2		2.9		5		84				<0.2		0.8	
					Bottom	6.5	0.3	99	27.4	27.4	7.7	7.7	20.4	20.4	67.7	67.8	4.8	4.8	12.6		4		88				<0.2		0.9	
						6.5	0.3	106	27.4		7.7		20.4		67.8		4.8		12.3		5		88				<0.2		0.8	
IM10	Sunny	Moderate	14:50	7.3	Surface	1.0	0.7	100	28.5	28.5	7.8	7.8	17.2	17.2	90.8	90.8	6.4	5.9	2.4	8.5	5	5	80	84	822380	809803	<0.2	<0.2	0.9	0.9
						1.0	0.7	106	28.5		7.8		17.2		90.7		6.4		2.4		5		79				<0.2		0.8	
					Middle	3.7	0.7	108	27.7	27.7	7.7	7.7	18.9	18.7	77.1	76.8	5.5		9.7		6		84				<0.2		0.9	
						3.7	0.7	110	27.6		7.7		18.6		76.4		5.4		9.6		5		85				<0.2		0.9	
					Bottom	6.3	0.4	99	27.4	27.4	7.7	7.7	20.5	20.5	68.4	68.4	4.8	4.8	13.5		6		88				<0.2		0.8	
						6.3	0.4	101	27.4		7.7		20.5		68.4		4.8		13.5		5		88				<0.2		0.9	
IM11	Sunny	Moderate	15:01	8.9	Surface	1.0	0.8	95	28.5	28.5	7.9	7.9	17.4	17.4	90.2	90.2	6.4	5.9	2.4	5.7	5	5	81	84	822054	811482	<0.2	<0.2	0.8	0.8
						1.0	0.9	103	28.5		7.9		17.4		90.2		6.4		2.4		5		80				<0.2		0.8	
					Middle	4.5	0.8	97	27.7	27.7	7.8	7.8	19.4	19.4	74.9	75.0	5.3		5.5		5		84				<0.2		0.8	
						4.5	0.8	98	27.7		7.8		19.4		75.1		5.3		5.5		4		85				<0.2		0.8	
					Bottom	7.9	0.4	109	26.3	26.3	7.7	7.7	25.4	25.4	54.9	55.0	3.8	3.9	9.2		5		88				<0.2		0.8	
						7.9	0.4	116	26.3		7.7		25.3		55.1		3.9		9.3		4		88				<0.2		0.9	
IM12	Sunny	Moderate	15:08	8.7	Surface	1.0	0.5	95	28.4	28.4	7.8	7.8	17.5	17.5	88.6	88.6	6.3	5.8	3.5	9.2	6	6	80	84	821462	812039	<0.2	<0.2	0.8	0.9
						1.0	0.5	96	28.4		7.8		17.5		88.6		6.3		3.4		5		80				<0.2		0.9	
					Middle	4.4	0.4	116	27.8	27.8	7.8	7.8	18.9	18.9	75.5	75.5	5.3		11.3		6		83				<0.2		0.9	
						4.4	0.4	122	27.8		7.8		18.9		75.4		5.3		11.4		6		84				<0.2		0.8	
					Bottom	7.7	0.2	92	27.7	27.7	7.7	7.7	19.5	19.5	72.1	72.1	5.1	5.1	13.0		6		87				<0.2		0.9	
						7.7	0.2	92	27.7		7.7		19.5		72.0		5.1		12.9		6		88				<0.2		1.0	
SR1A	Sunny	Moderate	15:28	5.6	Surface	1.0	-	-	28.5	28.5	7.9	7.9	17.7	17.7	91.0	91.0	6.4	6.4	2.7	3.2	7	7	-	-	819975	812662	-	-	-	-
						1.0	-	-	28.5		7.9		17.7		90.9		6.4		2.7		6		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	28.2	28.2	7.8	7.8	18.7	18.7	86.4	86.5	6.1	6.1	3.6		7		-				-		-	
						4.6	-	-	28.2		7.8		18.7		86.5		6.1		3.8		6		-				-		-	
SR2	Sunny	Moderate	15:40	4.8	Surface	1.0	0.5	86	28.7	28.7	7.9	7.9	17.0	17.0	96.0	96.0	6.8	6.8	2.0	3.8	6	5	80	82	821481	814187	<0.2	<0.2	0.9	0.9
						1.0	0.5	86	28.7		7.9		17.0		95.9		6.8		1.9		5		81				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.3	78	27.8	27.8	7.8	7.8	19.4	19.4	76.0	76.0	5.4	5.4	5.5		5		84				<0.2		0.9	
						3.8	0.3	82	27.8		7.8		19.4		76.0		5.4		5.6		4		84				<0.2		0.9	
SR3	Sunny	Moderate	14:30	9.0	Surface	1.0	0.0	246	28.6	28.6	7.8	7.8	16.9	16.9	89.0	89.0	6.3	6.0	2.5	6.7	4	5	-	-	822170	807571	-	-	-	-
						1.0	0.0	249	28.6		7.8		16.9		89.0		6.3		2.5		5		-				-		-	
					Middle	4.5	0.1	194	28.1	28.1	7.8	7.8	17.9	17.9	79.3	79.4	5.6		4.2		5		-				-		-	
						4.5	0.1	202	28.1		7.8		17.8		79.5		5.6		4.2		5		-				-		-	
					Bottom	8.0	0.1	258	27.2	27.2	7.7	7.7	21.1	21.1	63.4	63.5	4.5	4.5	13.4		5		-				-		-	
						8.0	0.1	258	27.2		7.7		21.1		63.5		4.5		13.5		5		-				-		-	
SR4A	Fine	Calm	15:49	8.4	Surface	1.0	0.5	254	28.8	28.8	8.1	8.1	17.9	17.9	101.1	101.0	7.1	5.5	4.3	6.7	5	5	-	-	817192	807801	-	-	-	-
						1.0	0.5	264	28.8		8.1		17.9		100.8		7.1		4.2		6		-				-		-	
					Middle	4.2	0.2	250	26.5	26.5	7.9	7.9	24.3	24.3	54.1	54.1	3.8		6.4		5		-				-		-	
						4.2	0.2	259	26.5		7.9		24.3		54.0		3.8		6.5		5		-				-		-	
					Bottom	7.4	0.0	233	25.7	25.7	7.9	7.9	27.1	27.1	41.5	41.5	2.9	2.9	9.4		4		-				-		-	
						7.4	0.0	235	25.7		7.9		27.1		41.5		2.9		9.5		5		-				-		-	
SR5A	Fine	Calm	16:09	3.7	Surface	1.0	0.2	307	29.2	29.2	8.3	8.3	17.8	17.8	113.9	113.8	7.9	7.9	5.0	7.0	7	8	-	-	816598	810693	-	-	-	-
						1.0	0.2	314	29.1		8.3		17.8		113.7		7.9		5.1		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.7	0.1	308	28.3	28.3	8.2	8.2	18.4	18.4	92.2	92.3	6.5	6.5	8.9		8		-				-		-	
						2.7	0.1	311	28.3		8.2		18.4		92.4		6.5		8.9		8		-				-		-	
SR6A	Fine	Calm	16:39	4.1	Surface	1.0	0.1	41	28.6	28.6	8.2	8.2	18.4	18.3	99.5	99.6	7.0	7.0	6.6	8.2	9	9	-	-	817964	814761	-	-	-	-
						1.0	0.1	43	28.6		8.2		18.3		99.6		7.0		6.6		9		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.1	277	27.2	27.2	8.1	8.1	22.3	22.3	72.5	72.7	5.1	5.1	9.8		9		-				-		-	
						3.1	0.1	304	27.2		8.1		22.3		72.8		5.1		9.8		10		-				-		-	
SR7	Sunny	Moderate	16:28	14.4	Surface	1.0	0.6	61	28.5	28.5	7.9	7.9	18.0	18.0	96.8	96.8	6.8	6.6	1.6	1.9	5	5	-	-	823657	823748	-	-	-	-
						1.0	0.7	63	28.5		7.9		18.0		96.7		6.8		1.6		4		-				-		-	
					Middle	7.2	0.2	14	28.1	28.1	7.9	7.9	19.1	19.1	89.8	89.9	6.3		2.2		5		-				-		-	
						7.2	0.2	14	28.1		7.9		19.1		90.0		6.3		2.1		4		-				-		-	
					Bottom	13.4	0.2	55	28.1	28.1	7.9	7.9	19.4	19.4	92.1	92.2	6.5	6.5	2.1		5		-				-		-	
						13.4	0.2	55	28.1		7.9		19.4		92.2		6.5		2.1		4		-				-		-	
SR8	Sunny	Moderate	15:19	4.1	Surface	1.0	-	-	28.8	28.8	7.9	7.9	17.3	17.3	94.9	94.9	6.7	6.7	3.4	3.5	6	6	-	-	820408	811638	-	-	-	-
						1.0	-	-	28.8		7.9		17.3		94.8		6.7		3.4		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	-	-	28.6	28.6	7.9	7.9	17.9	17.9	91.3	91.3	6.4	6.4	3.5		6		-				-		-	
						3.1	-	-	28.6		7.9		17.9		91.3		6.4		3.5		6		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Cloudy	Moderate	09:28	8.3	Surface	1.0	0.5	28	27.8	27.8	8.0	8.0	16.5	16.5	80.8	80.8	5.8	4.9	6.6	8.9	6	7	85	88	815624	804266	<0.2	<0.2	0.9	0.9
						1.0	0.5	29	27.7		8.0		16.5		80.7		5.8		6.6		7		85				<0.2		0.9	
					Middle	4.2	0.5	23	26.6	26.6	7.9	7.9	23.2	23.2	55.9	55.7	3.9		8.8		8		88				<0.2		0.9	
						4.2	0.6	23	26.6		7.9		23.1		55.5		3.9		8.6		7		88				<0.2		0.8	
					Bottom	7.3	0.5	38	25.0	25.0	7.9	7.9	29.6	29.6	41.1	41.2	2.9	2.9	11.3		8		90				<0.2		0.8	
						7.3	0.5	38	25.0		7.9		29.6		41.2		2.9		11.2		8		90				<0.2		0.8	
C2	Sunny	Moderate	10:14	11.3	Surface	1.0	0.3	350	28.8	28.8	7.8	7.8	13.8	13.8	90.7	90.7	6.5	5.9	2.8	4.4	4	4	83	87	825699	806953	<0.2	<0.2	0.9	1.0
						1.0	0.3	322	28.8		7.8		13.8		90.6		6.5		2.8		4		83				<0.2		0.9	
					Middle	5.7	0.4	28	28.1	28.1	7.7	7.7	18.0	18.0	74.2	74.2	5.3		3.5		4		87				<0.2		1.0	
						5.7	0.4	28	28.1		7.7		18.0		74.2		5.3		3.5		4		87				<0.2		1.0	
					Bottom	10.3	0.4	346	27.7	27.7	7.7	7.7	19.8	19.8	69.8	69.9	4.9	4.9	6.9		4		91				<0.2		1.1	
						10.3	0.4	356	27.7		7.7		19.8		70.0		4.9		6.9		5		90				<0.2		1.1	
C3	Fine	Moderate	08:30	10.4	Surface	1.0	0.3	241	28.4	28.4	7.8	7.8	15.7	15.7	86.4	86.4	6.2	5.6	2.4	2.7	4	3	82	86	822112	817787	<0.2	<0.2	1.0	1.0
						1.0	0.3	264	28.4		7.8		15.7		86.3		6.1		2.4		3		82				<0.2		1.0	
					Middle	5.2	0.4	252	27.3	27.3	7.8	7.8	21.9	21.9	72.8	72.7	5.1		2.1		3		86				<0.2		1.0	
						5.2	0.4	270	27.3		7.8		21.9		72.6		5.1		2.1		3		86				<0.2		1.0	
					Bottom	9.4	0.4	266	25.7	25.7	7.7	7.7	27.9	27.9	58.1	58.2	4.1	4.1	3.6		3		89				<0.2		1.0	
						9.4	0.4	279	25.7		7.7		27.9		58.2		4.1		3.7		3		89				<0.2		1.0	
IM1	Fine	Moderate	09:46	5.7	Surface	1.0	0.2	4	28.4	28.4	8.1	8.1	17.8	17.8	90.4	90.3	6.4	6.4	4.6	5.2	4	4	86	87	817940	807138	<0.2	<0.2	1.0	0.9
						1.0	0.2	4	28.4		8.1		17.8		90.2		6.4		4.7		4		86				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.7	0.1	345	27.6	27.6	8.1	8.1	20.2	20.1	76.7	76.8	5.4	5.4	5.8		5		88				<0.2		0.9	
						4.7	0.1	317	27.6		8.1		20.1		76.9		5.4		5.8		4		89				<0.2		0.8	
IM2	Fine	Moderate	09:54	7.8	Surface	1.0	0.4	7	28.1	28.1	8.0	8.0	16.3	16.3	87.9	87.9	6.3	6.1	4.8	5.3	4	4	84	87	818183	806164	<0.2	<0.2	0.9	0.8
						1.0	0.4	7	28.1		8.0		16.3		87.9		6.3		4.8		4		84				<0.2		0.8	
					Middle	3.9	0.3	344	27.9	27.9	8.0	8.0	17.7	17.7	82.0	82.0	5.8		5.0		4		87				<0.2		0.9	
						3.9	0.3	346	27.9		8.0		17.7		81.9		5.8		5.0		3		87				<0.2		0.8	
					Bottom	6.8	0.3	308	26.3	26.3	7.9	7.9	24.8	24.8	53.1	53.1	3.7	3.7	6.2		4		89				<0.2		0.8	
						6.8	0.4	334	26.3		7.9		24.8		53.1		3.7		6.3		3		89				<0.2		0.8	
IM3	Fine	Moderate	10:00	8.3	Surface	1.0	0.6	3	28.0	28.0	8.0	8.0	16.5	16.5	85.5	85.5	6.1	5.9	5.0	5.9	3	4	84	87	818801	805613	<0.2	<0.2	0.9	0.9
						1.0	0.6	3	28.0		8.0		16.5		85.4		6.1		5.0		4		84				<0.2		0.8	
					Middle	4.2	0.4	318	27.8	27.8	8.0	8.0	17.7	17.7	80.0	80.0	5.7		5.2		3		87				<0.2		0.9	
						4.2	0.4	349	27.8		8.0		17.7		79.9		5.7		5.2		4		87				<0.2		0.8	
					Bottom	7.3	0.4	280	25.9	25.9	7.9	7.9	26.1	26.1	50.4	50.5	3.5	3.5	7.5		4		89				<0.2		0.8	
						7.3	0.4	294	25.9		7.9		26.1		50.5		3.5		7.5		4		88				<0.2		0.9	
IM4	Fine	Moderate	10:09	9.0	Surface	1.0	0.8	4	28.1	28.1	8.0	8.0	15.7	15.7	85.2	85.2	6.1	5.8	5.5	5.8	4	4	84	86	819708	804613	<0.2	<0.2	0.8	0.8
						1.0	0.9	4	28.1		8.0		15.7		85.1		6.1		5.5		4		84				<0.2		0.9	
					Middle	4.5	0.8	344	27.5	27.5	7.9	7.9	18.9	18.9	75.4	75.4	5.4		5.9		4		86				<0.2		0.8	
						4.5	0.8	316	27.5		7.9		18.9		75.4		5.4		5.9		4		86				<0.2		0.8	
					Bottom	8.0	0.5	341	26.4	26.4	7.9	7.9	24.1	24.1	57.0	57.1	4.0	4.0	6.1		4		88				<0.2		0.9	
						8.0	0.6	352	26.4		7.9		24.1		57.1		4.0		6.1		4		88				<0.2		0.8	
IM5	Fine	Moderate	10:15	8.2	Surface	1.0	1.0	2	28.1	28.1	8.0	8.0	15.9	15.9	86.7	86.8	6.2	6.0	5.1	6.2	4	4	84	87	820737	804884	<0.2	<0.2	0.8	0.9
						1.0	1.1	2	28.1		8.0		15.9		86.8		6.2		5.0		3		84				<0.2		1.0	
					Middle	4.1	1.0	358	27.8	27.8	8.0	8.0	17.4	17.4	81.8	81.8	5.8		6.2		4		87				<0.2		0.8	
						4.1	1.1	358	27.8		8.0		17.5		81.7		5.8		6.2		5		87				<0.2		0.9	
					Bottom	7.2	0.6	11	26.8	26.8	7.9	7.9	22.2	22.2	63.6	63.6	4.5	4.5	7.2		4		89				<0.2		1.1	
						7.2	0.6	11	26.8		7.9		22.2		63.6		4.5		7.2		5		89				<0.2		0.9	
IM6	Fine	Moderate	10:22	7.9	Surface	1.0	0.2	275	28.3	28.4	8.0	8.0	16.5	16.5	85.8	85.8	6.1	6.0	4.6	5.6	3	3	85	87	821075	805826	<0.2	<0.2	0.8	0.9
						1.0	0.2	279	28.4		8.0		16.5		85.8		6.1		4.6		4		84				<0.2		0.8	
					Middle	4.0	0.0	310	28.1	28.1	8.0	8.0	17.2	17.2	82.1	82.1	5.8		5.1		4		87				<0.2		0.9	
						4.0	0.0	313	28.1		8.0		17.2		82.1		5.8		5.1		3		87				<0.2		0.9	
					Bottom	6.9	0.0	75	26.2	26.2	7.9	7.9	24.9	24.9	53.3	53.4	3.7	3.8	7.0		3		89				<0.2		0.8	
						6.9	0.0	76	26.2		7.9		24.9		53.4		3.8		7.1		3		89				<0.2		0.9	
IM7	Fine	Moderate	10:28	9.1	Surface	1.0	0.3	237	28.4	28.4	8.0	8.0	16.1	16.1	85.8	85.8	6.1	5.8	4.3	5.9	2	3	84	86	821355	806836	<0.2	<0.2	0.8	0.9
						1.0	0.4	257	28.4		8.0		16.1		85.7		6.1		4.4		2		84				<0.2		0.9	
					Middle	4.6	0.2	209	27.7	27.7	8.0	7.9	19.2	19.2	76.5	76.5	5.4		5.3		3		87				<0.2		0.9	
						4.6	0.2	214	27.7		7.9		19.2		76.5		5.4		5.2		2		86				<0.2		0.9	
					Bottom	8.1	0.2	141	26.1	26.1	7.9	7.9	25.4	25.4	51.3	51.4	3.6	3.6	8.0		3		89				<0.2		0.9	
						8.1	0.2	154	26.1		7.9		25.4		51.5		3.6		8.1		3		88				<0.2		0.9	
IM8	Sunny	Moderate	09:49	7.9	Surface	1.0	0.2	240	28.4	28.4	7.8	7.8	16.5	16.4	81.5	81.6	5.8	5.7	4.6	8.8	5	5	82	87	821838	808124	<0.2	<0.2	1.0	1.0
						1.0	0.2	252	28.4		7.8		16.4		81.6		5.8		4.6		5		83				<0.2		0.9	
					Middle	4.0	0.1	46	28.2	28.2	7.7	7.7	16.9	16.9	77.0	77.0	5.5		6.3		5		87				<0.2		1.0	
						4.0	0.1	49	28.2		7.7		16.9		77.0		5.5		6.2		5		86				<0.2		0.9	
					Bottom	6.9	0.3	79	28.0	28.0	7.7	7.7	17.9	17.9	73.1	73.1	5.2	5.2	15.5		6		91				<0.2		1.0	
						6.9	0.3	85	28.0		7.7		17.9		73.1		5.2		15.8		6		91				<0.2		1.0	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 25 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	09:43	7.6	Surface	1.0	0.1	261	28.3	28.3	7.8	7.8	17.4	17.4	79.3	79.3	5.6	5.5	6.9	10.4	12	10	83	87	822108	808808	<0.2	<0.2	1.0	1.0
						1.0	0.2	271	28.3		7.8		17.4		79.3		5.6		6.9		12		83				<0.2		0.9	
					Middle	3.8	0.2	269	28.1	28.1	7.7	7.7	17.9	17.9	74.8	74.8	5.3		11.9		10		87				<0.2		0.9	
						3.8	0.2	279	28.1		7.7		17.9		74.7		5.3		11.9		10		86				<0.2		1.1	
					Bottom	6.6	0.1	254	28.0	28.0	7.7	7.7	18.5	18.5	73.1	73.1	5.2	5.2	12.2		8		91				<0.2		1.0	
						6.6	0.1	270	28.0		7.7		18.5		73.1		5.2		12.3		8		91				<0.2		0.9	
IM10	Sunny	Moderate	09:36	8.1	Surface	1.0	0.4	287	28.5	28.5	7.8	7.8	16.2	16.2	84.5	84.5	6.0	5.9	4.0	6.4	4	4	83	87	822407	809803	<0.2	<0.2	0.9	1.0
						1.0	0.4	311	28.5		7.8		16.2		84.5		6.0		3.9		4		83				<0.2		1.0	
					Middle	4.1	0.4	280	28.2	28.2	7.8	7.8	17.1	17.1	80.6	80.6	5.7		3.7		4		87				<0.2		1.0	
						4.1	0.5	290	28.2		7.8		17.1		80.5		5.7		3.6		4		86				<0.2		0.9	
					Bottom	7.1	0.3	299	27.4	27.4	7.7	7.7	20.7	20.7	67.9	67.8	4.8	4.8	11.6		5		90				<0.2		1.0	
						7.1	0.3	318	27.4		7.7		20.7		67.7		4.8		11.7		4		91				<0.2		0.9	
IM11	Sunny	Moderate	09:26	7.7	Surface	1.0	0.3	300	28.3	28.3	7.8	7.8	16.6	16.6	82.7	82.6	5.9	5.3	2.9	7.5	4	3	82	86	822071	811481	<0.2	<0.2	1.0	0.9
						1.0	0.3	315	28.3		7.8		16.6		82.5		5.9		2.9		4		83				<0.2		0.9	
					Middle	3.9	0.4	274	27.2	27.2	7.7	7.7	21.7	21.7	66.4	66.4	4.7		7.9		3		86				<0.2		0.9	
						3.9	0.4	295	27.2		7.7		21.7		66.4		4.7		8.2		4		87				<0.2		0.9	
					Bottom	6.7	0.3	286	26.9	27.0	7.7	7.7	22.6	22.6	63.1	63.1	4.4	4.4	11.8		3		90				<0.2		0.9	
						6.7	0.3	308	27.0		7.7		22.6		63.1		4.4		11.6		2		90				<0.2		0.9	
IM12	Sunny	Moderate	09:20	8.8	Surface	1.0	0.5	271	28.4	28.4	7.8	7.8	16.6	16.6	87.8	87.8	6.2	5.8	2.2	6.7	2	2	83	87	821470	812067	<0.2	<0.2	0.9	0.9
						1.0	0.5	283	28.4		7.8		16.6		87.8		6.2		2.2		3		82				<0.2		0.9	
					Middle	4.4	0.6	262	27.6	27.6	7.8	7.8	20.0	20.0	75.1	75.1	5.3		4.3		2		87				<0.2		0.9	
						4.4	0.6	263	27.6		7.8		20.1		75.0		5.3		4.3		3		87				<0.2		0.9	
					Bottom	7.8	0.7	250	27.3	27.3	7.7	7.7	21.1	21.1	68.2	68.2	4.8	4.8	13.6		2		91				<0.2		0.9	
						7.8	0.7	271	27.3		7.7		21.1		68.1		4.8		13.8		2		91				<0.2		1.0	
SR1A	Fine	Moderate	09:02	5.5	Surface	1.0	-	-	28.4	28.4	7.8	7.8	16.4	16.5	83.3	83.2	5.9	5.9	3.8	4.2	3	3	-	-	819975	812662	-	-	-	-
						1.0	-	-	28.4		7.8		16.5		83.1		5.9		3.8		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	28.3	28.3	7.8	7.8	17.1	17.1	79.7	79.7	5.7	5.7	4.5		2		-				-		-	
						4.5	-	-	28.3		7.8		17.1		79.7		5.7		4.5		3		-				-		-	
SR2	Fine	Moderate	08:50	4.8	Surface	1.0	0.1	342	28.5	28.5	7.8	7.8	15.4	15.4	84.6	84.6	6.0	6.0	2.8	2.9	3	3	82	85	821483	814167	<0.2	<0.2	1.0	1.0
						1.0	0.1	315	28.5		7.8		15.4		84.5		6.0		2.8		2		82				<0.2		1.0	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	351	28.1	28.1	7.8	7.8	17.3	17.3	79.6	79.7	5.7	5.7	2.9		3		87				<0.2		0.9	
						3.8	0.2	323	28.1		7.8		17.2		79.7		5.7		3.0		3		87				<0.2		1.1	
SR3	Sunny	Moderate	09:55	8.2	Surface	1.0	0.3	270	28.6	28.6	7.8	7.8	15.3	15.3	86.3	86.3	6.2	5.9	3.2	5.6	3	4	-	-	822126	807568	-	-	-	-
						1.0	0.3	274	28.6		7.8		15.3		86.2		6.1		3.2		4		-				-		-	
					Middle	4.1	0.1	300	28.2	28.2	7.7	7.7	16.8	16.8	78.1	78.1	5.6		5.2		4		-				-		-	
						4.1	0.1	316	28.2		7.7		16.8		78.1		5.6		5.2		3		-				-		-	
					Bottom	7.2	0.3	59	28.0	28.0	7.7	7.7	18.0	18.0	74.0	74.1	5.3	5.3	8.3		4		-				-		-	
						7.2	0.3	62	28.0		7.7		18.0		74.1		5.3		8.4		5		-				-		-	
SR4A	Cloudy	Calm	09:04	9.4	Surface	1.0	0.1	221	28.2	28.2	8.0	8.0	17.2	17.2	84.8	84.7	6.0	5.6	5.9	7.6	4	5	-	-	817210	807831	-	-	-	-
						1.0	0.1	237	28.2		8.0		17.2		84.6		6.0		5.9		5		-				-		-	
					Middle	4.7	0.2	63	27.5	27.5	8.0	8.0	20.1	20.1	72.3	72.2	5.1		7.4		5		-				-		-	
						4.7	0.2	63	27.4		8.0		20.1		72.1		5.1		7.4		6		-				-		-	
					Bottom	8.4	0.1	69	26.1	26.1	7.9	7.9	25.8	25.8	53.9	54.0	3.8	3.8	9.3		6		-				-		-	
						8.4	0.1	75	26.1		7.9		25.8		54.1		3.8		9.4		4		-				-		-	
SR5A	Fine	Calm	08:48	3.8	Surface	1.0	0.2	307	28.5	28.5	8.1	8.1	17.5	17.5	93.4	93.3	6.6	6.6	6.1	7.1	5	5	-	-	816579	810710	-	-	-	-
						1.0	0.2	311	28.5		8.1		17.5		93.2		6.6		6.3		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.2	293	28.4	28.4	8.1	8.1	17.9	17.9	91.4	91.4	6.4	6.4	8.0		4		-				-		-	
						2.8	0.2	307	28.4		8.1		17.9		91.4		6.4		8.0		4		-				-		-	
SR6A	Fine	Calm	08:20	4.3	Surface	1.0	0.1	201	28.3	28.3	7.9	7.9	16.3	16.3	87.9	87.8	6.3	6.3	4.4	4.5	3	4	-	-	817961	814739	-	-	-	-
						1.0	0.1	217	28.3		7.9		16.3		87.7		6.2		4.4		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.3	0.1	223	28.3	28.3	7.9	7.9	17.0	17.0	86.8	86.9	6.2	6.2	4.7		4		-				-		-	
						3.3	0.1	241	28.3		7.9		17.0		87.0		6.2		4.7		4		-				-		-	
SR7	Fine	Moderate	07:58	14.6	Surface	1.0	0.0	116	28.4	28.4	7.8	7.8	15.7	15.7	86.7	86.7	6.2	5.8	2.3	2.8	2	2	-	-	823616	823762	-	-	-	-
						1.0	0.0	117	28.4		7.8		15.7		86.6		6.2		2.4		3		-				-		-	
					Middle	7.3	0.1	184	27.5	27.5	7.8	7.8	20.8	20.7	75.1	75.1	5.3		2.0		2		-				-		-	
						7.3	0.1	192	27.5		7.8		20.7		75.1		5.3		2.0		2		-				-		-	
					Bottom	13.6	0.1	76	25.6	25.6	7.7	7.7	28.1	28.1	56.7	56.8	4.0	4.0	4.1		2		-				-		-	
						13.6	0.1	83	25.6		7.7		28.1		56.8		4.0		4.2		2		-				-		-	
SR8	Fine	Moderate	09:12	4.8	Surface	1.0	-	-	28.4	28.4	7.8	7.8	16.8	16.8	83.9	83.9	5.9	5.9	3.7	4.1	3	4	-	-	820370	811615	-	-	-	-
						1.0	-	-	28.4		7.8		16.8		83.8		5.9		3.7		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	28.2	28.2	7.8	7.8	17.5	17.4	80.6	80.7	5.7	5.7	4.4		4		-				-		-	
						3.8	-	-	28.2		7.8		17.4		80.8		5.7		4.4		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Rough	17:01	8.4	Surface	1.0	0.4	206	29.0	29.0	8.2	8.2	17.2	17.3	123.6	123.2	8.6	8.0	3.3	5.3	4	5	84	87	815640	804236	<0.2	<0.2	1.0	1.0
						1.0	0.4	208	29.0		8.2		17.4		122.8		8.6		3.3		4		87				<0.2		1.2	
					Middle	4.2	0.6	188	28.8	28.8	8.2	8.2	17.8	17.8	106.1	105.6	7.4		4.3		5		87				<0.2		1.1	
						4.2	0.6	192	28.7		8.2		17.8		105.1		7.4		4.4		4		88				<0.2		1.0	
					Bottom	7.4	0.4	237	25.0	25.0	7.9	7.9	30.2	30.2	49.7	49.8	3.5	3.5	8.3		7		89				<0.2		0.9	
						7.4	0.5	252	25.0		7.9		30.2		49.8		3.5		8.2		6		89				<0.2		1.0	
C2	Sunny	Moderate	15:50	11.4	Surface	1.0	0.2	135	29.6	29.6	7.9	7.9	15.2	15.2	102.6	102.6	7.2	6.3	2.1	6.1	3	4	80	83	825695	806939	<0.2	<0.2	1.3	1.4
						1.0	0.2	141	29.6		7.9		15.2		102.5		7.2		2.0		3		79				<0.2		1.5	
					Middle	5.7	0.5	154	27.8	27.8	7.7	7.7	19.9	19.8	74.7	74.8	5.3		2.8		3		83				<0.2		1.4	
						5.7	0.5	161	27.8		7.7		19.8		74.9		5.3		2.8		4		83				<0.2		1.4	
					Bottom	10.4	0.5	144	25.6	25.6	7.6	7.6	28.0	28.0	46.5	46.5	3.2	3.3	13.5		4		88				<0.2		1.5	
						10.4	0.5	154	25.6		7.6		28.0		46.5		3.3		13.6		5		87				<0.2		1.4	
C3	Fine	Moderate	18:15	12.6	Surface	1.0	0.4	286	28.7	28.7	8.0	8.0	18.6	18.6	108.9	108.8	7.6	5.9	1.5	3.3	6	5	80	84	822090	817803	<0.2	<0.2	0.9	1.0
						1.0	0.4	297	28.7		8.0		18.6		108.6		7.6		1.5		6		80				<0.2		1.0	
					Middle	6.3	0.2	257	26.1	26.2	7.7	7.7	26.3	26.2	60.7	60.8	4.2		3.8		4		84				<0.2		0.9	
						6.3	0.2	278	26.2		7.7		26.2		60.9		4.3		3.8		4		84				<0.2		1.0	
					Bottom	11.6	0.1	120	25.3	25.3	7.7	7.7	28.8	28.8	51.3	51.4	3.6	3.6	4.6		5		87				<0.2		1.0	
						11.6	0.1	130	25.3		7.7		28.8		51.4		3.6		4.6		4		88				<0.2		0.9	
IM1	Sunny	Rough	16:40	5.0	Surface	1.0	0.1	215	27.3	27.3	8.0	8.0	23.3	23.1	81.3	82.1	5.7	5.8	6.3	9.9	6	5	87	88	817955	807128	<0.2	<0.2	0.9	0.9
						1.0	0.1	217	27.3		8.0		23.0		82.8		5.8		6.3		5		86				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	0.1	210	26.0	26.0	7.9	7.9	26.6	26.6	52.8	52.8	3.7	3.7	13.4		4		89				<0.2		0.9	
						4.0	0.1	230	26.0		7.9		26.6		52.8		3.7		13.4		5		89				<0.2		0.9	
IM2	Sunny	Rough	16:31	7.2	Surface	1.0	0.3	160	28.5	28.5	8.1	8.1	17.9	17.8	108.7	108.3	7.6	5.7	4.1	9.6	4	5	85	87	818165	806161	<0.2	<0.2	1.0	1.0
						1.0	0.3	175	28.5		8.1		17.8		107.8		7.6		4.0		5		85				<0.2		1.0	
					Middle	3.6	0.2	129	25.8	25.8	7.9	7.9	27.3	27.2	54.1	54.2	3.8		10.6		5		87				<0.2		0.9	
						3.6	0.3	136	25.8		7.9		27.2		54.3		3.8		10.2		4		88				<0.2		0.9	
					Bottom	6.2	0.1	29	25.6	25.6	7.9	7.9	28.3	28.3	49.9	50.0	3.5	3.5	14.6		6		89				<0.2		1.0	
						6.2	0.1	30	25.6		7.9		28.3		50.1		3.5		14.5		5		90				<0.2		1.0	
IM3	Sunny	Rough	16:23	6.7	Surface	1.0	0.1	194	29.0	29.0	8.2	8.2	17.3	17.3	118.2	118.1	8.3	7.5	3.6	4.9	6	5	86	87	818772	805590	<0.2	<0.2	0.9	1.0
						1.0	0.1	209	29.0		8.2		17.3		117.9		8.2		3.6		5		84				<0.2		0.9	
					Middle	3.4	0.2	156	28.0	28.0	8.0	8.0	19.5	19.6	96.1	95.2	6.8		4.7		6		87				<0.2		1.1	
						3.4	0.3	160	27.9		8.0		19.6		94.3		6.6		4.7		5		88				<0.2		1.0	
					Bottom	5.7	0.3	113	25.7	25.8	7.8	7.8	27.4	27.4	51.1	51.3	3.6	3.6	6.6		5		89				<0.2		0.9	
						5.7	0.3	115	25.8		7.9		27.4		51.4		3.6		6.3		4		88				<0.2		1.0	
IM4	Sunny	Moderate	16:13	7.7	Surface	1.0	0.8	204	29.8	29.8	8.2	8.2	14.5	14.5	120.2	120.1	8.4	6.6	3.2	7.9	5	6	85	87	819745	804616	<0.2	<0.2	1.0	1.0
						1.0	0.9	204	29.8		8.2		14.6		119.9		8.4		3.2		5		86				<0.2		1.0	
					Middle	3.9	0.6	177	26.5	26.5	7.9	7.9	24.0	24.0	67.1	67.0	4.7		8.8		6		86				<0.2		1.0	
						3.9	0.6	181	26.5		7.9		24.0		66.9		4.7		9.0		5		87				<0.2		1.0	
					Bottom	6.7	0.3	159	26.0	26.0	7.9	7.9	26.6	26.7	58.5	58.5	4.1	4.1	11.8		6		88				<0.2		1.1	
						6.7	0.3	160	26.0		7.9		26.7		58.5		4.1		11.1		6		89				<0.2		1.0	
IM5	Sunny	Moderate	16:06	7.9	Surface	1.0	0.6	197	30.1	30.1	8.2	8.2	15.1	15.1	116.2	116.1	8.1	6.9	3.1	6.2	3	3	85	87	820739	804883	<0.2	<0.2	1.0	1.1
						1.0	0.7	210	30.1		8.2		15.1		116.0		8.1		3.1		4		85				<0.2		1.1	
					Middle	4.0	0.5	217	27.5	27.5	8.0	8.0	21.3	21.3	82.1	81.4	5.8		5.7		2		88				<0.2		1.1	
						4.0	0.6	221	27.5		8.0		21.4		80.6		5.7		6.0		4		86				<0.2		1.1	
					Bottom	6.9	0.3	184	26.2	26.2	7.9	7.9	25.9	25.9	58.4	58.5	4.1	4.1	9.5		3		89				<0.2		1.2	
						6.9	0.3	194	26.2		7.9		25.9		58.5		4.1		9.5		3		89				<0.2		1.3	
IM6	Sunny	Moderate	15:57	7.4	Surface	1.0	0.3	215	29.8	29.8	8.2	8.2	13.1	13.1	114.5	114.4	8.1	6.9	3.3	8.4	4	4	85	87	821064	805815	<0.2	<0.2	1.1	1.1
						1.0	0.4	230	29.8		8.2		13.1		114.3		8.1		3.4		5		86				<0.2		1.1	
					Middle	3.7	0.4	236	27.2	27.2	7.9	7.9	19.4	19.4	80.2	80.1	5.7		9.5		4		87				<0.2		1.1	
						3.7	0.4	236	27.1		7.9		19.4		80.0		5.7		9.9		4		87				<0.2		1.1	
					Bottom	6.4	0.2	190	26.8	26.8	7.9	7.9	23.6	23.6	67.5	67.6	4.7	4.7	12.2		3		89				<0.2		1.2	
						6.4	0.2	199	26.8		7.9		23.6		67.6		4.7		12.2		3		89				<0.2		1.1	
IM7	Sunny	Moderate	15:50	8.0	Surface	1.0	0.2	243	28.7	28.7	8.1	8.1	16.0	16.0	105.6	105.6	7.5	6.5	4.6	6.9	6	4	85	88	821342	806839	<0.2	<0.2	1.0	1.1
						1.0	0.2	254	28.6		8.1		16.0		105.5		7.5		4.8		4		86				<0.2		1.2	
					Middle	4.0	0.3	232	27.6	27.6	7.9	7.9	19.9	19.9	77.3	77.3	5.5		7.2		4		87				<0.2		1.1	
						4.0	0.3	233	27.6		7.9		19.9		77.3		5.5		7.3		4		88				<0.2		1.0	
					Bottom	7.0	0.1	49	27.1	27.1	8.0	8.0	22.6	22.6	71.4	71.4	5.0	5.0	8.9		4		90				<0.2		1.0	
						7.0	0.1	49	27.1		8.0		22.6		71.4		5.0		8.8		4		89				<0.2		1.0	
IM8	Sunny	Moderate	16:14	8.2	Surface	1.0	0.1	164	29.1	29.1	8.0	8.0	16.0	16.0	103.4	103.3	7.3	6.3	2.4	4.9	4	4	81	84	821816	808151	<0.2	<0.2	1.3	1.3
						1.0	0.1	175	29.1		8.0		16.0		103.2		7.3		2.4		3		80				<0.2		1.4	
					Middle	4.1	0.4	153	27.8	27.8	7.7	7.7	20.0	20.0	74.1	74.1	5.2		5.3		3		84				<0.2		1.4	
						4.1	0.4	160	27.8		7.8		20.0		74.1		5.2		5.2		4		84				<0.2		1.4	
					Bottom	7.2	0.1	126	27.6	27.6	7.8	7.8	21.0	21.1	72.8	72.8	5.1	5.1	6.9		4		87				<0.2		1.2	
						7.2	0.1	129	27.6		7.8		21.1		72.8		5.1		7.0		3		88				<0.2		1.3	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Sunny	Moderate	16:20	7.7	Surface	1.0	0.2	90	29.2	29.2	8.0	8.0	15.7	15.6	106.8	106.8	7.5	6.5	2.4	5.3	4	3	80	84	822089	808798	<0.2	<0.2	1.4	1.3
						1.0	0.3	90	29.2		8.0		15.6		106.7		7.5		2.4		3		80				<0.2		1.4	
					Middle	3.9	0.3	95	27.9	27.9	7.8	7.8	19.7	19.7	77.9	77.9	5.5		6.0		4		83				<0.2		1.3	
						3.9	0.3	96	27.9		7.8		19.7		77.8		5.5		6.1		3		84				<0.2		1.3	
					Bottom	6.7	0.3	64	27.6	27.6	7.8	7.8	20.7	20.7	72.8	72.8	5.1	5.1	7.4		3		88				<0.2		1.3	
						6.7	0.3	67	27.6		7.8		20.7		72.8		5.1		7.5		3		88				<0.2		1.3	
IM10	Sunny	Moderate	16:26	7.4	Surface	1.0	0.5	128	28.9	28.9	8.0	8.0	16.1	16.1	105.0	105.0	7.4	6.9	2.0	7.0	3	3	80	84	822405	809812	<0.2	<0.2	1.2	1.3
						1.0	0.6	134	28.9		8.0		16.1		105.0		7.4		2.0		2		79				<0.2		1.2	
					Middle	3.7	0.6	134	28.4	28.4	7.9	7.9	17.6	17.5	87.7	89.5	6.2		2.6		3		84				<0.2		1.3	
						3.7	0.6	139	28.4		7.9		17.5		91.3		6.4		2.4		3		84				<0.2		1.2	
					Bottom	6.4	0.3	151	27.0	27.0	7.7	7.7	23.1	23.1	62.1	62.1	4.4	4.4	16.7		3		88				<0.2		1.3	
						6.4	0.3	159	27.0		7.7		23.2		62.1		4.4		16.1		4		88				<0.2		1.4	
IM11	Sunny	Moderate	17:21	7.8	Surface	1.0	0.8	96	29.2	29.2	8.0	8.0	15.7	15.7	110.3	110.1	7.8	6.7	2.0	4.3	4	4	80	84	822033	811460	<0.2	<0.2	1.3	1.3
						1.0	0.8	99	29.2		8.0		15.7		109.9		7.7		2.0		4		80				<0.2		1.3	
					Middle	3.9	0.7	85	28.0	28.0	7.8	7.8	19.4	19.4	80.0	79.8	5.6		3.5		4		84				<0.2		1.2	
						3.9	0.7	88	27.9		7.8		19.4		79.6		5.6		3.6		4		84				<0.2		1.3	
					Bottom	6.8	0.4	93	26.6	26.6	7.7	7.7	24.4	24.4	59.3	59.4	4.2	4.2	7.4		3		88				<0.2		1.2	
						6.8	0.5	102	26.6		7.7		24.4		59.5		4.2		7.3		2		88				<0.2		1.4	
IM12	Sunny	Moderate	17:26	8.7	Surface	1.0	0.6	98	29.3	29.3	8.0	8.0	15.3	15.3	111.2	111.0	7.8	6.6	1.7	4.6	3	3	79	84	821464	812046	<0.2	<0.2	1.2	1.2
						1.0	0.7	106	29.3		8.0		15.3		110.8		7.8		1.7		3		80				<0.2		1.1	
					Middle	4.4	0.5	81	27.9	27.9	7.8	7.8	19.5	19.5	75.3	75.3	5.3		5.2		3		83				<0.2		1.1	
						4.4	0.5	86	27.9		7.8		19.5		75.2		5.3		5.2		3		84				<0.2		1.2	
					Bottom	7.7	0.4	96	27.7	27.7	7.7	7.7	20.3	20.3	72.8	73.0	5.1	5.1	7.0		3		87				<0.2		1.3	
						7.7	0.4	99	27.7		7.7		20.2		73.1		5.1		6.7		3		88				<0.2		1.3	
SR1A	Fine	Moderate	17:44	5.3	Surface	1.0	-	-	29.5	29.5	8.1	8.1	17.0	17.0	128.5	128.5	8.9	8.9	2.2	2.4	4	5	-	-	819976	812658	-	-	-	-
						1.0	-	-	29.5		8.1		17.0		128.4		8.9		2.2		4		-				-		-	
					Middle	2.7	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.7	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.3	-	-	28.7	28.7	8.0	8.0	18.7	18.7	107.3	107.4	7.5	7.5	2.6		5		-				-		-	
						4.3	-	-	28.7		8.0		18.7		107.4		7.5		2.7		6		-				-		-	
SR2	Fine	Moderate	17:56	4.8	Surface	1.0	0.4	47	28.7	28.7	7.9	7.9	17.0	17.1	102.1	101.9	7.2	7.2	2.3	3.1	4	4	80	82	821455	814143	<0.2	<0.2	1.2	1.2
						1.0	0.4	48	28.7		7.9		17.1		101.6		7.2		2.5		4		80				<0.2		1.2	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.2	32	28.2	28.2	7.8	7.8	18.6	18.6	84.8	84.9	6.0	6.0	3.8		3		83				<0.2		1.2	
						3.8	0.2	34	28.2		7.8		18.5		85.0		6.0		3.7		4		83				<0.2		1.2	
SR3	Sunny	Moderate	16:08	9.7	Surface	1.0	0.1	257	29.3	29.3	8.0	8.0	15.2	15.2	106.6	106.4	7.5	6.3	2.0	7.0	3	4	-	-	822150	807581	-	-	-	-
						1.0	0.1	265	29.3		8.0		15.2		106.1		7.5		2.0		3		-				-		-	
					Middle	4.9	0.5	161	27.6	27.6	7.7	7.7	20.8	20.7	70.6	70.7	5.0		5.5		4		-				-		-	
						4.9	0.5	174	27.6		7.7		20.7		70.7		5.0		5.4		5		-				-		-	
					Bottom	8.7	0.3	180	27.4	27.4	7.8	7.8	21.5	21.5	71.7	71.7	5.0	5.0	13.7		4		-				-		-	
						8.7	0.3	192	27.4		7.8		21.5		71.7		5.0		13.5		5		-				-		-	
SR4A	Sunny	Moderate	17:24	8.8	Surface	1.0	0.3	240	29.1	29.1	8.3	8.3	17.7	17.7	130.1	130.2	9.1	6.4	4.3	10.4	5	5	-	-	817185	807818	-	-	-	-
						1.0	0.3	252	29.1		8.3		17.7		130.3		9.1		4.2		6		-				-		-	
					Middle	4.4	0.1	69	25.8	25.8	7.9	7.9	27.4	27.4	51.7	51.7	3.6		11.3		5		-				-		-	
						4.4	0.1	72	25.8		7.9		27.4		51.7		3.6		11.3		4		-				-		-	
					Bottom	7.8	0.0	57	25.6	25.6	7.9	7.9	28.3	28.3	51.3	51.4	3.6	3.6	15.9		4		-				-		-	
						7.8	0.0	62	25.6		7.9		28.3		51.5		3.6		15.4		4		-				-		-	
SR5A	Cloudy	Moderate	17:43	3.5	Surface	1.0	0.1	273	29.2	29.2	8.3	8.3	18.3	18.3	144.5	144.4	10.0	10.0	6.3	8.0	5	5	-	-	816603	810681	-	-	-	-
						1.0	0.1	299	29.2		8.3		18.3		144.3		10.0		6.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.1	286	28.9	28.9	8.3	8.3	18.6	18.6	130.7	130.7	9.1	9.1	9.4		5		-				-		-	
						2.5	0.1	296	28.9		8.3		18.6		130.7		9.1		9.5		6		-				-		-	
SR6A	Cloudy	Moderate	18:10	4.1	Surface	1.0	0.1	55	29.6	29.6	8.3	8.3	18.0	18.0	130.4	130.3	9.0	9.0	7.2	10.7	8	7	-	-	817986	814721	-	-	-	-
						1.0	0.1	60	29.6		8.3		18.0		130.1		9.0		7.2		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.1	0.0	246	27.4	27.4	8.0	8.0	21.8	21.8	75.0	75.2	5.3	5.3	14.3		5		-				-		-	
						3.1	0.0	257	27.4		8.0		21.8		75.3		5.3		14.3		6		-				-		-	
SR7	Fine	Moderate	18:45	14.8	Surface	1.0	0.6	61	29.0	29.0	8.1	8.1	16.9	16.9	113.0	113.0	7.9	7.9	1.4	1.8	3	3	-	-	823649	823757	-	-	-	-
						1.0	0.7	67	29.0		8.1		16.9		112.9		7.9		1.4		3		-				-		-	
					Middle	7.4	0.2	14	28.8	28.8	8.1	8.0	18.3	18.3	111.8	111.8	7.8		1.8		3		-				-		-	
						7.4	0.2	14	28.8		8.0		18.3		111.8		7.8		1.8		3		-				-		-	
					Bottom	13.8	0.2	55	28.3	28.3	8.0	8.0	19.9	19.9	101.3	101.2	7.1	7.1	2.2		3		-				-		-	
						13.8	0.2	59	28.3		8.0		19.9		101.1		7.1		2.3		3		-				-		-	
SR8	Fine	Moderate	17:34	4.4	Surface	1.0	-	-	29.7	29.7	7.9	7.9	16.9	16.9	105.8	105.8	7.3	7.3	3.9	7.4	6	5	-	-	820385	811601	-	-	-	-
						1.0	-	-	29.7		7.9		16.9		105.8		7.3		3.8		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.4	-	-	29.0	29.0	8.0	8.0	17.3	17.3	103.7	103.7	7.2	7.2	11.0		5		-				-		-	
						3.4	-	-	29.0		8.0		17.3		103.7		7.2		11.0		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	11:08	8.5	Surface	1.0	0.4	30	28.1	28.1	8.0	8.0	17.5	17.5	85.6	85.5	6.1	5.5	4.5	6.9	3	3	85	87	815624	804229	<0.2	<0.2	1.0	1.0
						1.0	0.4	30	28.0		8.0		17.5		85.4		6.1		4.6		4		86				<0.2		1.0	
					Middle	4.3	0.4	21	27.6	27.6	7.9	7.9	20.0	20.0	70.5	70.1	5.0		5.7		4		87				<0.2		1.1	
						4.3	0.4	22	27.6		7.9		20.0		69.6		4.9		5.7		3		87				<0.2		1.0	
					Bottom	7.5	0.3	42	25.6	25.6	7.9	7.9	28.1	28.1	50.3	50.4	3.5	3.5	10.5		2		90				<0.2		1.0	
						7.5	0.3	43	25.6		7.9		28.1		50.5		3.5		10.5		3		89				<0.2		1.0	
C2	Sunny	Moderate	11:28	12.2	Surface	1.0	0.3	350	29.6	29.6	7.8	7.8	12.3	12.3	93.0	92.9	6.6	5.8	2.5	4.2	2	2	83	87	825685	806924	<0.2	<0.2	1.3	1.4
						1.0	0.3	322	29.6		7.8		12.3		92.8		6.6		2.5		2		83				<0.2		1.3	
					Middle	6.1	0.4	28	27.9	27.9	7.7	7.7	19.8	19.8	71.5	71.5	5.0		2.6		2		87				<0.2		1.2	
						6.1	0.4	28	27.8		7.7		19.8		71.5		5.0		2.6		2		87				<0.2		1.4	
					Bottom	11.2	0.4	346	27.1	27.1	7.7	7.7	22.6	22.7	61.4	61.2	4.3	4.3	7.3		2		91				<0.2		1.5	
						11.2	0.4	318	27.1		7.7		22.7		61.0		4.3		7.8		2		90				<0.2		1.4	
C3	Sunny	Moderate	09:38	12.1	Surface	1.0	0.3	244	28.5	28.5	7.9	7.9	16.5	16.5	88.1	88.2	6.2	5.8	1.8	2.0	2	3	82	85	822097	817804	<0.2	<0.2	1.3	1.3
						1.0	0.3	250	28.5		7.9		16.4		88.2		6.3		1.7		2		81				<0.2		1.3	
					Middle	6.1	0.4	250	27.4	27.4	7.8	7.8	22.0	22.0	75.7	75.7	5.3		1.5		2		86				<0.2		1.4	
						6.1	0.4	264	27.4		7.8		22.0		75.6		5.3		1.4		3		85				<0.2		1.3	
					Bottom	11.1	0.4	266	26.0	26.0	7.7	7.7	26.7	26.7	58.8	58.9	4.1	4.1	2.6		4		89				<0.2		1.3	
						11.1	0.4	271	26.0		7.7		26.7		58.9		4.1		2.7		3		89				<0.2		1.3	
IM1	Sunny	Moderate	11:26	5.2	Surface	1.0	0.2	344	28.7	28.7	8.1	8.1	16.2	16.2	102.6	102.6	7.3	7.3	3.6	4.2	<2	2	87	88	817964	807131	<0.2	<0.2	1.2	1.2
						1.0	0.2	316	28.7		8.1		16.2		102.6		7.3		3.6		<2		86				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.2	0.3	276	28.6	28.6	8.1	8.1	17.0	17.0	102.3	102.3	7.2	7.2	4.8		2		89				<0.2		1.1	
						4.2	0.3	284	28.6		8.1		17.0		102.3		7.2		4.8		2		88				<0.2		1.2	
IM2	Sunny	Moderate	11:35	7.2	Surface	1.0	0.3	31	28.5	28.5	8.0	8.0	15.3	15.3	98.8	98.6	7.1	6.6	4.0	6.0	<2	2	85	87	818184	806172	<0.2	<0.2	1.2	0.8
						1.0	0.3	33	28.4		8.0		15.3		98.3		7.0		4.0		<2		85				<0.2		1.3	
					Middle	3.6	0.3	335	28.1	28.1	8.0	8.0	18.9	18.9	88.4	88.4	6.2		4.3		2		87				<0.2		0.4	
						3.6	0.3	346	28.1		8.0		18.9		88.4		6.2		4.3		2		87				<0.2		0.6	
					Bottom	6.2	0.2	270	26.6	26.6	7.9	7.9	23.0	23.0	69.2	68.0	4.9	4.8	9.8		3		89				<0.2		0.5	
						6.2	0.2	279	26.5		7.9		23.1		66.7		4.7		10.0		2		89				<0.2		0.5	
IM3	Sunny	Moderate	11:42	7.8	Surface	1.0	0.4	1	29.3	29.3	8.1	8.1	14.7	14.7	100.6	100.6	7.1	6.3	3.3	6.7	2	3	85	87	818774	805583	<0.2	<0.2	1.2	1.2
						1.0	0.4	1	29.3		8.1		14.7		100.6		7.1		3.3		2		86				<0.2		1.2	
					Middle	3.9	0.4	324	27.7	27.7	8.0	8.0	20.1	20.1	77.8	77.8	5.5		4.8		3		87				<0.2		1.1	
						3.9	0.5	335	27.7		8.0		20.1		77.7		5.5		5.1		2		88				<0.2		1.1	
					Bottom	6.8	0.4	274	26.2	26.2	8.0	8.0	26.0	26.0	60.4	60.4	4.2	4.2	11.7		3		89				<0.2		1.3	
						6.8	0.4	297	26.2		8.0		26.0		60.4		4.2		11.8		3		89				<0.2		1.1	
IM4	Sunny	Moderate	11:51	8.0	Surface	1.0	0.6	358	28.1	28.1	8.1	8.0	16.4	16.2	94.8	94.7	6.8	5.9	4.5	7.1	<2	<2	84	87	819722	804610	<0.2	<0.2	1.1	1.2
						1.0	0.6	329	28.1		8.0		15.9		94.6		6.8		4.5		<2		85				<0.2		1.1	
					Middle	4.0	0.7	333	26.8	26.8	8.0	8.0	22.1	22.1	71.0	71.0	5.0		5.3		<2		88				<0.2		1.2	
						4.0	0.7	356	26.8		8.0		22.1		70.9		5.0		5.3		<2		87				<0.2		1.2	
					Bottom	7.0	0.4	341	26.2	26.2	8.0	8.0	26.2	26.2	62.1	62.3	4.3	4.4	11.3		<2		90				<0.2		1.2	
						7.0	0.4	354	26.2		8.0		26.2		62.5		4.4		12.0		<2		89				<0.2		1.1	
IM5	Sunny	Moderate	11:57	7.5	Surface	1.0	0.8	1	28.4	28.4	8.0	8.0	17.5	17.5	95.4	95.3	6.7	6.3	4.2	8.4	2	3	85	87	820712	804848	<0.2	<0.2	1.1	1.1
						1.0	0.8	1	28.3		8.0		17.6		95.2		6.7		4.4		2		86				<0.2		1.2	
					Middle	3.8	0.8	358	27.8	27.8	8.0	8.0	20.5	20.5	82.7	82.8	5.8		8.2		3		87				<0.2		1.2	
						3.8	0.8	329	27.8		8.0		20.4		82.9		5.8		8.5		2		87				<0.2		1.1	
					Bottom	6.5	0.5	34	26.8	26.8	8.0	8.0	23.5	23.5	69.1	69.3	4.8	4.9	12.7		4		89				<0.2		1.1	
						6.5	0.6	35	26.8		8.0		23.5		69.4		4.9		12.3		3		89				<0.2		1.1	
IM6	Sunny	Moderate	12:05	7.2	Surface	1.0	0.1	66	30.9	29.2	8.0	8.0	17.1	18.0	92.0	90.0	6.5	5.8	7.6	9.5	4	4	86	88	821081	805848	<0.2	<0.2	1.1	1.1
						1.0	0.1	70	27.5		8.0		18.9		88.0		6.3		7.9		4		85				<0.2		1.1	
					Middle	3.6	0.1	85	27.0	27.0	8.0	8.0	23.0	23.0	72.8	72.8	5.1		10.2		4		87				<0.2		1.1	
						3.6	0.1	89	27.0		8.0		23.0		72.8		5.1		10.2		2		88				<0.2		1.1	
					Bottom	6.2	0.2	111	27.0	27.0	8.0	8.0	23.1	23.1	73.9	74.0	5.2	5.2	10.6		3		89				<0.2		1.1	
						6.2	0.2	119	27.0		8.0		23.1		74.1		5.2		10.8		4		90				<0.2		1.1	
IM7	Sunny	Moderate	12:12	8.0	Surface	1.0	0.1	87	28.5	28.5	8.1	8.1	16.6	16.7	95.2	95.0	6.7	6.6	3.8	6.5	5	3	86	87	821336	806834	<0.2	<0.2	1.0	1.0
						1.0	0.1	93	28.5		8.1		16.7		94.8		6.7		4.0		4		85				<0.2		1.0	
					Middle	4.0	0.2	114	27.9	27.9	8.1	8.1	17.4	17.4	90.0	90.0	6.4		4.2		3		87				<0.2		1.0	
						4.0	0.2	123	27.9		8.1		17.4		89.9		6.4		4.2		3		88				<0.2		1.0	
					Bottom	7.0	0.2	66	27.1	27.2	8.0	8.0	23.0	23.0	76.6	76.8	5.4	5.4	11.3		2		89				<0.2		1.0	
						7.0	0.2	67	27.2		8.0		23.0		76.9		5.4		11.4		3		89				<0.2		1.0	
IM8	Sunny	Moderate	11:01	7.9	Surface	1.0	0.1	267	28.9	28.9	7.8	7.8	15.2	15.2	91.4	91.4	6.5	6.4	2.1	4.3	4	3	82	86	821848	808117	<0.2	<0.2	1.3	1.3
						1.0	0.1	288	28.9		7.8		15.2		91.4		6.5		2.2		2		82				<0.2		1.3	
					Middle	4.0	0.2	275	28.6	28.6	7.8	7.8	16.0	16.0	87.1	87.0	6.2		4.5		3		87				<0.2		1.3	
						4.0	0.2	295	28.6		7.8		16.0		86.8		6.2		4.6		3		86				<0.2		1.2	
					Bottom	6.9	0.2	264	28.3	28.3	7.8	7.8	17.2	17.2	80.0	80.0	5.7	5.7	6.2		3		90				<0.2		1.2	
						6.9	0.2	279	28.3		7.8		17.2		80.0		5.7		6.3		2		91				<0.2		1.2	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 27 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C) Value	Water Temperature (°C) Average	pH Value	pH Average	Salinity (ppt) Value	Salinity (ppt) Average	DO Saturation (%) Value	DO Saturation (%) Average	Dissolved Oxygen Value	Dissolved Oxygen DA	Turbidity(NTU) Value	Turbidity(NTU) DA	Suspended Solids (mg/L) Value	Suspended Solids (mg/L) DA	Total Alkalinity (ppm) Value	Total Alkalinity (ppm) DA	Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L) Value	Chromium (µg/L) DA	Nickel (µg/L) Value	Nickel (µg/L) DA
IM9	Sunny	Moderate	10:55	8.0	Surface	1.0	0.5	260	28.7	28.7	7.8	7.8	16.2	16.2	88.5	88.5	6.3	6.1	3.8	7.0	6	6	83	87	822096	808799	<0.2	<0.2	1.3	1.3
						1.0	0.5	270	28.7		7.8		16.2		88.5		6.3		3.9		7		82				<0.2		1.3	
					Middle	4.0	0.4	269	28.4	28.5	7.8	7.8	17.0	16.9	83.2	83.3	5.9		6.3		6		87				<0.2		1.3	
						4.0	0.4	278	28.5		7.8		16.9		83.3		5.9		6.4		7		86				<0.2		1.3	
					Bottom	7.0	0.2	274	28.2	28.2	7.8	7.8	17.9	17.9	76.7	76.8	5.4	5.4	10.7		5		90				<0.2		1.2	
						7.0	0.2	281	28.2		7.8		17.9		76.8		5.4		10.8		6		91				<0.2		1.3	
IM10	Sunny	Moderate	10:47	7.8	Surface	1.0	0.4	333	28.6	28.6	7.8	7.8	15.7	15.7	88.0	88.0	6.3	6.1	2.6	6.4	3	2	82	86	822372	809801	<0.2	<0.2	1.3	1.2
						1.0	0.4	338	28.6		7.8		15.7		88.0		6.2		2.6		2		83				<0.2		1.3	
					Middle	3.9	0.5	321	28.4	28.4	7.8	7.8	17.0	16.9	82.6	82.6	5.9		4.2		2		87				<0.2		1.2	
						3.9	0.5	342	28.4		7.8		16.9		82.5		5.8		4.1		3		86				<0.2		1.1	
					Bottom	6.8	0.4	308	27.5	27.5	7.7	7.7	20.9	20.9	65.7	65.7	4.6	4.6	12.3		2		90				<0.2		1.2	
						6.8	0.4	310	27.5		7.7		20.9		65.7		4.6		12.4		2		90				<0.2		1.2	
IM11	Sunny	Moderate	10:37	7.8	Surface	1.0	0.4	319	28.7	28.7	7.8	7.8	15.3	15.3	89.7	89.6	6.4	6.0	2.7	4.3	2	2	82	86	822043	811467	<0.2	<0.2	1.4	1.3
						1.0	0.4	343	28.7		7.8		15.4		89.5		6.4		2.7		2		83				<0.2		1.3	
					Middle	3.9	0.5	302	28.1	28.1	7.8	7.8	18.4	18.3	78.4	78.4	5.5		3.4		3		86				<0.2		1.2	
						3.9	0.5	322	28.1		7.8		18.3		78.3		5.5		3.3		2		87				<0.2		1.4	
					Bottom	6.8	0.3	310	26.9	26.9	7.7	7.7	23.4	23.4	62.2	62.2	4.4	4.4	6.9		2		90				<0.2		1.4	
						6.8	0.4	335	26.9		7.7		23.4		62.1		4.3		6.9		3		90				<0.2		1.3	
IM12	Sunny	Moderate	10:30	8.9	Surface	1.0	0.4	273	29.0	29.0	7.9	7.9	14.7	14.8	93.0	93.0	6.6	6.5	2.6	3.1	3	3	83	87	821463	812069	<0.2	<0.2	1.6	1.5
						1.0	0.4	296	29.0		7.9		14.8		92.9		6.6		2.6		3		82				<0.2		1.5	
					Middle	4.5	0.7	273	28.4	28.4	7.9	7.9	17.4	17.4	90.7	90.8	6.4		2.6		3		87				<0.2		1.5	
						4.5	0.7	297	28.4		7.9		17.4		90.9		6.4		2.6		2		86				<0.2		1.4	
					Bottom	7.9	0.3	262	27.8	27.8	7.8	7.8	20.2	20.2	82.2	82.1	5.8	5.8	4.3		2		91				<0.2		1.5	
						7.9	0.3	263	27.8		7.8		20.2		81.9		5.8		4.2		2		90				<0.2		1.4	
SR1A	Sunny	Moderate	10:11	5.6	Surface	1.0	-	-	28.9	28.9	7.9	7.9	15.2	15.2	94.9	94.9	6.7	6.7	2.0	2.8	2	2	-	-	819982	812662	-	-	-	-
						1.0	-	-	28.9		7.9		15.2		94.9		6.7		2.0		2		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.6	-	-	28.5	28.5	7.8	7.8	17.1	17.1	86.9	87.0	6.1	6.1	3.8		2		-				-		-	
						4.6	-	-	28.5		7.8		17.1		87.0		6.1		3.6		2		-				-		-	
SR2	Sunny	Moderate	09:59	4.8	Surface	1.0	0.0	140	28.4	28.4	7.8	7.8	16.6	16.6	85.2	85.2	6.0	6.0	2.6	3.5	4	4	82	85	821465	814156	<0.2	<0.2	1.4	1.3
						1.0	0.0	146	28.4		7.8		16.6		85.1		6.0		2.5		5		82				<0.2		1.3	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	0.1	352	27.7	27.7	7.8	7.8	19.9	19.9	77.5	77.5	5.5	5.5	4.4		4		87				<0.2		1.2	
						3.8	0.1	356	27.7		7.8		20.0		77.4		5.5		4.4		3		87				<0.2		1.3	
SR3	Sunny	Moderate	11:08	8.7	Surface	1.0	0.1	284	28.8	28.9	7.9	7.9	14.7	14.7	93.3	93.4	6.6	6.2	2.2	2.9	4	4	-	-	822137	807588	-	-	-	-
						1.0	0.1	307	28.9		7.9		14.7		93.4		6.6		2.2		3		-				-		-	
					Middle	4.4	0.2	290	28.4	28.4	7.8	7.8	16.8	16.8	81.9	81.9	5.8		2.9		3		-				-		-	
						4.4	0.2	315	28.4		7.8		16.8		81.9		5.8		2.8		4		-				-		-	
					Bottom	7.7	0.1	107	28.0	28.0	7.8	7.8	18.9	18.9	75.1	75.2	5.3	5.3	3.5		4		-				-		-	
						7.7	0.1	113	28.0		7.8		18.8		75.3		5.3		3.5		5		-				-		-	
SR4A	Sunny	Moderate	10:44	8.6	Surface	1.0	0.2	228	27.6	27.6	8.1	8.1	18.6	18.6	90.0	89.5	6.4	5.7	6.7	7.8	4	5	-	-	817176	807799	-	-	-	-
						1.0	0.2	233	27.6		8.1		18.6		89.0		6.3		6.8		5		-				-		-	
					Middle	4.3	0.0	165	27.5	27.5	7.9	7.9	22.0	22.0	70.9	71.1	5.0		7.1		4		-				-		-	
						4.3	0.0	175	27.5		7.9		22.0		71.2		5.0		7.2		5		-				-		-	
					Bottom	7.6	0.0	260	26.0	26.0	7.9	7.9	27.0	27.0	52.8	52.9	3.7	3.7	9.5		4		-				-		-	
						7.6	0.0	280	26.0		7.9		27.0		53.0		3.7		9.4		5		-				-		-	
SR5A	Sunny	Calm	10:27	3.5	Surface	1.0	0.2	304	28.5	28.5	8.2	8.2	18.8	18.8	103.2	103.1	7.2	7.2	7.4	7.7	8	6	-	-	816595	810709	-	-	-	-
						1.0	0.2	321	28.5		8.2		18.8		102.9		7.2		7.7		7		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.5	0.2	307	28.5	28.5	8.2	8.2	18.8	18.8	102.8	102.8	7.2	7.2	7.7		5		-				-		-	
						2.5	0.2	323	28.5		8.2		18.8		102.8		7.2		7.8		4		-				-		-	
SR6A	Sunny	Calm	09:57	4.6	Surface	1.0	0.1	190	28.5	28.5	8.0	8.0	16.7	16.8	98.0	98.0	6.9	6.9	3.7	4.3	4	3	-	-	817975	814733	-	-	-	-
						1.0	0.1	196	28.5		8.0		16.8		97.9		6.9		3.8		3		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	281	28.4	28.4	8.0	8.0	17.6	17.6	95.3	95.2	6.7	6.7	4.8		2		-				-		-	
						3.6	0.0	297	28.4		8.0		17.6		95.1		6.7		4.9		3		-				-		-	
SR7	Sunny	Moderate	09:06	14.8	Surface	1.0	0.0	117	28.5	28.5	7.9	7.9	16.7	16.7	92.9	92.9	6.6	6.0	1.3	2.0	4	4	-	-	823652	823723	-	-	-	-
						1.0	0.0	122	28.5		7.9		16.7		92.8		6.6		1.3		3		-				-		-	
					Middle	7.4	0.1	183	27.3	27.3	7.8	7.8	22.2	22.2	76.3	76.2	5.3		1.1		3		-				-		-	
						7.4	0.1	184	27.3		7.8		22.2		76.1		5.3		1.2		4		-				-		-	
					Bottom	13.8	0.1	75	25.2	25.2	7.6	7.6	29.3	29.3	49.3	49.4	3.4	3.5	3.6		4		-				-		-	
						13.8	0.1	77	25.2		7.6		29.3		49.4		3.5		3.5		4		-				-		-	
SR8	Sunny	Moderate	10:21	4.7	Surface	1.0	-	-	29.0	29.0	7.8	7.8	15.5	15.5	88.9	88.9	6.3	6.3	11.0	8.5	11	12	-	-	820379	811601	-	-	-	-
						1.0	-	-	29.0		7.8		15.5		88.8		6.3		11.1		12		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	-	-	28.0	28.0	7.8	7.8	19.3	19.3	78.0	78.1	5.5	5.5	6.0		13		-				-		-	
						3.7	-	-	28.0		7.8		19.3		78.1		5.5		6.0		13		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	08:38	8.9	Surface	1.0	0.4	208	28.1	28.1	8.2	8.2	17.6	17.7	84.9	84.1	6.0	5.2	4.7	6.1	7	5	83	88	815616	804260	<0.2	<0.2	0.9	0.8
						1.0	0.4	219	28.1		8.2		17.7		83.3		5.9		4.6		6		84				<0.2		0.8	
					Middle	4.5	0.5	181	26.1	26.2	8.1	8.1	25.7	25.7	64.6	64.6	4.5		5.0		4		89				<0.2		0.7	
						4.5	0.5	188	26.2		8.1		25.6		64.6		4.5		5.0		5		88				<0.2		0.8	
					Bottom	7.9	0.5	226	24.9	24.9	8.1	8.1	31.1	31.1	55.7	55.8	3.9	3.9	8.5		4		92				<0.2		0.8	
						7.9	0.5	228	24.9		8.1		31.1		55.9		3.9		8.8		4		93				<0.2		0.8	
C2	Cloudy	Moderate	09:51	11.7	Surface	1.0	0.9	153	29.5	29.5	8.0	8.0	11.5	11.6	90.1	88.7	6.5	5.5	3.7	5.1	3	4	86	88	825685	806935	<0.2	<0.2	1.0	1.0
						1.0	0.9	168	29.4		8.0		11.7		87.3		6.3		3.6		3		86				<0.2		1.0	
					Middle	5.9	0.6	145	27.1	27.1	7.7	7.7	22.8	22.8	64.1	64.1	4.5		3.5		3		88				<0.2		1.1	
						5.9	0.6	151	27.1		7.7		22.8		64.0		4.5		3.5		4		89				<0.2		1.1	
					Bottom	10.7	0.5	135	26.0	26.0	7.7	7.7	27.6	27.6	55.1	55.4	3.8	3.9	8.2		5		90				<0.2		0.9	
						10.7	0.5	136	26.0		7.7		27.6		55.7		3.9		8.1		4		90				<0.2		1.0	
C3	Cloudy	Moderate	07:51	11.5	Surface	1.0	0.4	133	28.4	28.4	8.0	8.0	17.4	17.5	102.7	102.7	7.3	6.8	2.4	3.3	3	4	86	88	822128	817824	<0.2	<0.2	1.1	1.1
						1.0	0.4	135	28.4		8.0		17.5		102.6		7.2		2.4		3		85				<0.2		1.0	
					Middle	5.8	0.2	109	27.4	27.4	8.0	8.0	21.7	21.7	92.0	91.7	6.4		1.8		4		88				<0.2		1.0	
						5.8	0.2	109	27.4		8.0		21.7		91.4		6.4		1.8		5		88				<0.2		1.2	
					Bottom	10.5	0.2	324	25.0	25.0	7.8	7.8	30.1	30.1	59.5	59.6	4.1	4.2	5.8		5		90				<0.2		1.0	
						10.5	0.3	324	25.0		7.8		30.1		59.7		4.2		5.4		4		90				<0.2		1.0	
IM1	Sunny	Calm	08:59	4.6	Surface	1.0	0.1	228	25.8	25.8	8.1	8.1	27.7	27.8	66.2	66.2	4.5	4.5	9.6	10.9	4	3	86	87	817931	807121	<0.2	<0.2	0.7	0.8
						1.0	0.1	235	25.8		8.1		27.8		66.2		4.5		9.9		4		86				<0.2		0.7	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.0	164	25.5	25.5	8.1	8.1	28.7	28.6	59.9	60.1	4.2	4.2	12.3		2		89				<0.2		0.8	
						3.6	0.0	165	25.5		8.1		28.6		60.3		4.2		12.0		3		89				<0.2		0.8	
IM2	Sunny	Moderate	09:06	6.9	Surface	1.0	0.2	130	26.3	26.3	8.1	8.1	25.3	25.4	66.2	66.1	4.7	4.5	4.9	5.9	4	4	84	89	818157	806182	<0.2	<0.2	0.7	0.7
						1.0	0.2	130	26.2		8.1		25.4		66.0		4.6		5.3		5		85				<0.2		0.7	
					Middle	3.5	0.3	134	25.4	25.4	8.0	8.0	28.9	28.9	63.7	63.8	4.3		6.0		5		88				<0.2		0.7	
						3.5	0.3	138	25.3		8.0		28.9		63.8		4.4		5.9		4		89				<0.2		0.7	
					Bottom	5.9	0.1	63	25.1	25.1	8.1	8.1	30.7	30.6	56.4	56.6	3.9	3.9	6.7		3		93				<0.2		0.8	
						5.9	0.1	68	25.1		8.1		30.6		56.7		3.9		6.8		3		92				<0.2		0.7	
IM3	Sunny	Moderate	09:12	7.1	Surface	1.0	0.2	190	27.6	27.6	8.2	8.2	20.0	20.0	81.1	81.0	5.7	4.7	4.2	5.5	7	5	83	89	818785	805610	<0.2	<0.2	0.7	0.7
						1.0	0.2	202	27.6		8.2		20.0		80.9		5.7		4.3		6		84				<0.2		0.7	
					Middle	3.6	0.3	164	25.5	25.5	8.0	8.0	28.8	28.8	52.1	52.1	3.6		5.6		4		89				<0.2		0.7	
						3.6	0.4	180	25.4		8.0		28.8		52.1		3.6		5.3		5		91				<0.2		0.7	
					Bottom	6.1	0.2	133	25.1	25.1	8.0	8.0	30.4	30.3	53.1	53.3	3.7	3.7	6.8		3		91				<0.2		0.8	
						6.1	0.2	133	25.1		8.0		30.2		53.4		3.7		6.9		4		93				<0.2		0.8	
IM4	Sunny	Moderate	09:22	8.0	Surface	1.0	1.0	190	29.2	29.2	8.2	8.2	9.8	9.8	93.2	93.1	6.8	5.4	6.1	7.4	5	4	84	88	819724	804614	<0.2	<0.2	0.7	0.8
						1.0	1.1	207	29.2		8.2		9.9		92.9		6.8		6.1		4		84				<0.2		0.7	
					Middle	4.0	0.6	197	26.3	26.3	8.0	8.0	25.2	25.2	57.4	57.4	4.0		7.2		4		88				<0.2		0.8	
						4.0	0.7	203	26.2		8.0		25.2		57.4		4.0		7.1		4		89				<0.2		0.7	
					Bottom	7.0	0.3	171	25.5	25.5	8.0	8.0	28.9	28.9	51.6	51.7	3.6	3.6	9.1		3		93				<0.2		0.8	
						7.0	0.3	183	25.5		8.0		28.8		51.7		3.6		9.0		4		92				<0.2		0.8	
IM5	Sunny	Moderate	09:32	7.2	Surface	1.0	0.7	210	29.0	29.0	8.2	8.2	10.5	10.4	93.8	93.8	6.8	5.7	5.8	6.9	3	4	84	89	820737	804866	<0.2	<0.2	0.8	0.9
						1.0	0.7	219	29.0		8.2		10.3		93.7		6.8		5.7		4		86				<0.2		0.9	
					Middle	3.6	0.7	229	27.4	27.5	8.0	8.0	22.3	22.2	66.2	66.6	4.6		7.0		4		89				<0.2		0.9	
						3.6	0.8	243	27.5		8.0		22.2		66.9		4.7		6.8		3		89				<0.2		0.9	
					Bottom	6.2	0.5	211	26.4	26.4	8.0	8.0	25.3	25.3	60.2	60.6	4.2	4.3	8.2		4		92				<0.2		0.9	
						6.2	0.5	214	26.4		8.0		25.3		60.9		4.3		8.1		3		93				<0.2		0.8	
IM6	Sunny	Moderate	09:41	7.0	Surface	1.0	0.4	206	29.1	29.1	8.2	8.2	9.6	9.7	96.9	96.8	7.1	6.6	5.2	5.6	4	4	85	88	821073	805828	<0.2	<0.2	0.8	0.8
						1.0	0.4	211	29.0		8.2		9.7		96.6		7.1		5.1		3		86				<0.2		0.8	
					Middle	3.5	0.4	249	28.6	28.6	8.2	8.2	15.6	15.6	84.6	84.6	6.0		4.9		4		89				<0.2		0.8	
						3.5	0.4	257	28.6		8.2		15.6		84.5		6.0		5.6		4		90				<0.2		0.9	
					Bottom	6.0	0.4	255	27.2	27.3	8.0	8.0	23.3	23.2	68.9	69.4	4.8	4.9	6.2		5		90				<0.2		0.8	
						6.0	0.5	269	27.3		8.0		23.2		69.8		4.9		6.4		4		90				<0.2		0.9	
IM7	Sunny	Moderate	09:50	8.2	Surface	1.0	0.3	270	28.9	28.9	8.2	8.2	11.8	12.2	97.7	97.5	7.1	6.5	4.6	5.0	4	4	83	88	821327	806822	<0.2	<0.2	0.9	0.9
						1.0	0.3	291	28.9		8.2		12.7		97.3		7.0		4.6		4		84				<0.2		0.8	
					Middle	4.1	0.3	292	28.5	28.5	8.2	8.2	16.2	16.2	82.8	82.6	5.9		4.8		4		88				<0.2		0.9	
						4.1	0.4	318	28.5		8.2		16.2		82.4		5.8		4.8		4		88				<0.2		0.9	
					Bottom	7.2	0.2	207	26.2	26.2	8.0	8.0	26.0	26.0	59.5	59.7	4.2	4.2	5.6		3		93				<0.2		0.8	
						7.2	0.2	225	26.2		8.0		26.0		59.8		4.2		5.4		4		92				<0.2		0.8	
IM8	Cloudy	Moderate	09:23	7.4	Surface	1.0	0.3	211	29.2	29.2	7.9	7.9	11.8	11.9	92.7	92.4	6.7	5.7	3.5	5.7	2	3	86	88	821852	808146	<0.2	<0.2	0.5	0.8
						1.0	0.3	226	29.2		7.9		11.9		92.0		6.6		3.7		4		87				<0.2		0.6	
					Middle	3.7	0.2	213	27.1	27.1	7.7	7.7	21.1	21.1	66.7	66.6	4.7		6.4		3		88				<0.2		0.8	
						3.7	0.2	222	27.0		7.7		21.1		66.4		4.7		6.7		3		87				<0.2		0.9	
					Bottom	6.4	0.1	144	26.7	26.8	7.7	7.7	24.1	24.1	66.1	66.6	4.6	4.7	7.0		3		89				<0.2		1.0	
						6.4	0.2	151	26.8		7.7		24.1		67.0		4.7		6.9		3		90				<0.2		1.0	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 June 20 during Mid-Ebb Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	09:17	7.2	Surface	1.0	0.4	109	29.1	29.1	7.9	7.9	11.5	11.5	92.8	92.8	6.7	5.9	3.7	5.2	3	4	87	88	822070	808825	<0.2	<0.2	0.9	0.9
						1.0	0.4	109			7.9		11.5		92.8		6.7		3.6		3		86				<0.2		0.8	
					Middle	3.6	0.4	111	27.7	27.7	7.7	7.7	18.0	17.9	71.8	71.8	5.1		4.8		4		88				<0.2		1.1	
						3.6	0.4	120	27.7		7.7		17.9		71.7		5.1		4.9		4		89				<0.2		1.1	
					Bottom	6.2	0.3	58	27.1	27.1	7.7	7.7	22.4	22.4	64.9	65.0	4.6	4.6	7.0		4		90				<0.2		0.6	
						6.2	0.3	63	27.1		7.7		22.4		65.1		4.6		7.2		4		90				<0.2		0.6	
IM10	Cloudy	Moderate	09:09	7.3	Surface	1.0	0.6	99	28.8	28.8	8.0	8.0	11.8	11.1	93.0	92.8	6.8	6.2	4.5	6.8	4	3	86	88	822361	809806	<0.2	<0.2	0.5	0.6
						1.0	0.7	108	28.7		8.0		10.4		92.6		6.8		4.6		3		87				<0.2		0.5	
					Middle	3.7	0.7	99	28.2	28.2	7.8	7.8	17.0	17.0	79.2	79.2	5.6		5.6		4		88				<0.2		0.5	
						3.7	0.7	100	28.2		7.8		17.0		79.1		5.6		5.6		3		89				<0.2		0.6	
					Bottom	6.3	0.5	72	27.2	27.2	7.7	7.7	22.7	22.7	69.5	69.8	4.9	4.9	10.1		3		90				<0.2		0.8	
						6.3	0.6	79	27.2		7.7		22.8		70.0		4.9		10.2		3		90				<0.2		0.8	
IM11	Cloudy	Moderate	08:57	8.2	Surface	1.0	0.7	90	29.2	29.3	8.0	8.0	12.6	12.6	94.4	94.2	6.7	6.0	3.0	5.2	5	5	87	88	822035	811471	<0.2	<0.2	0.5	0.7
						1.0	0.7	98	29.3		8.0		12.6		94.0		6.7		3.2		4		86				<0.2		0.5	
					Middle	4.1	0.7	78	27.7	27.7	7.8	7.8	20.0	19.9	73.7	73.8	5.2		4.9		5		88				<0.2		0.5	
						4.1	0.7	79	27.6		7.8		19.9		73.9		5.2		5.1		5		88				<0.2		0.5	
					Bottom	7.2	0.3	91	26.7	26.7	7.7	7.7	24.3	24.3	61.7	61.8	4.3	4.3	7.3		5		89				<0.2		1.1	
						7.2	0.3	93	26.6		7.7		24.4		61.9		4.3		7.4		4		90				<0.2		0.9	
IM12	Cloudy	Moderate	08:48	9.0	Surface	1.0	0.5	106	29.4	29.4	8.0	8.0	11.7	11.7	98.3	98.3	7.0	6.0	4.4	7.0	4	5	86	88	821476	812042	<0.2	<0.2	0.8	0.8
						1.0	0.5	108	29.4		8.0		11.7		98.2		7.0		4.4		4		86				<0.2		0.8	
					Middle	4.5	0.4	101	28.0	28.0	7.7	7.7	18.6	18.5	70.4	70.3	5.0		7.1		5		89				<0.2		0.5	
						4.5	0.4	108	28.0		7.7		18.5		70.1		5.0		7.2		6		88				<0.2		0.6	
					Bottom	8.0	0.2	145	25.8	25.8	7.7	7.7	27.4	27.5	53.6	53.7	3.7	3.8	9.3		6		90				<0.2		1.0	
						8.0	0.2	148	25.7		7.7		27.5		53.8		3.8		9.7		5		90				<0.2		1.0	
SR1A	Cloudy	Moderate	08:31	5.5	Surface	1.0	-	-	29.1	29.1	8.0	8.0	12.5	12.5	105.8	105.8	7.6	7.6	2.9	2.9	3	4	-	-	819981	812659	-	-	-	-
						1.0	-	-	29.1		8.0		12.5		105.7		7.6		2.8		4		-				-		-	
					Middle	2.8	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.8	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.5	-	-	29.0	29.0	8.0	8.0	14.8	15.3	99.7	99.7	7.0	7.0	2.9		4		-				-		-	
						4.5	-	-	29.0		8.0		15.8		99.6		7.0		3.0		5		-				-		-	
SR2	Cloudy	Moderate	08:17	4.7	Surface	1.0	0.4	54	29.2	29.2	8.0	8.0	11.9	11.8	97.6	97.8	7.0	7.1	3.8	3.4	5	5	87	89	821470	814158	<0.2	<0.2	1.0	0.7
						1.0	0.4	56	29.1		8.0		11.7		98.0		7.1		3.6		4		89				<0.2		0.9	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.7	0.3	35	28.7	28.7	8.0	8.0	16.4	16.4	97.7	97.6	6.9	6.9	3.0		6		90				<0.2		0.4	
						3.7	0.3	36	28.7		8.0		16.4		97.5		6.9		3.1		5		90				<0.2		0.4	
SR3	Cloudy	Moderate	09:29	8.9	Surface	1.0	0.3	182	29.5	29.5	8.0	8.0	8.9	8.9	94.7	94.5	6.9	5.7	3.9	8.0	4	4	-	-	822159	807547	-	-	-	-
						1.0	0.3	187	29.5		8.0		8.9		94.2		6.8		4.0		4		-				-		-	
					Middle	4.5	0.2	225	27.4	27.4	7.7	7.7	21.4	21.4	64.3	64.4	4.5		5.5		3		-				-		-	
						4.5	0.2	241	27.3		7.7		21.4		64.5		4.5		6.0		4		-				-		-	
					Bottom	7.9	0.0	68	26.4	26.4	7.7	7.7	25.3	25.3	59.8	59.9	4.2	4.2	14.4		3		-				-		-	
						7.9	0.0	74	26.4		7.7		25.4		60.0		4.2		14.4		4		-				-		-	
SR4A	Sunny	Calm	08:18	9.3	Surface	1.0	0.1	27	28.5	28.5	8.2	8.2	15.3	15.3	85.6	85.5	6.1	4.9	5.5	6.7	6	7	-	-	817179	807827	-	-	-	-
						1.0	0.1	27	28.5		8.2		15.2		85.4		6.1		5.7		7		-				-		-	
					Middle	4.7	0.3	70	25.3	25.3	8.0	8.0	29.4	29.4	53.7	53.7	3.7		6.8		6		-				-		-	
						4.7	0.3	70	25.3		8.0		29.4		53.7		3.7		6.7		7		-				-		-	
					Bottom	8.3	0.2	72	25.3	25.3	8.0	8.0	29.6	29.6	54.1	54.2	3.8	3.8	7.8		7		-				-		-	
						8.3	0.2	77	25.3		8.0		29.6		54.3		3.8		7.8		7		-				-		-	
SR5A	Sunny	Calm	08:02	4.0	Surface	1.0	0.1	13	29.1	29.1	8.3	8.3	15.4	15.4	108.5	108.5	7.7	7.7	5.1	5.9	5	6	-	-	816570	810713	-	-	-	-
						1.0	0.1	13	29.1		8.3		15.4		108.4		7.7		5.5		6		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.0	0.0	318	28.8	28.8	8.3	8.3	17.7	17.7	101.5	101.5	7.1	7.1	6.5		6		-				-		-	
						3.0	0.0	327	28.8		8.3		17.7		101.4		7.1		6.6		5		-				-		-	
SR6A	Sunny	Calm	07:35	4.6	Surface	1.0	0.1	332	28.0	28.0	8.0	8.0	18.6	18.6	90.8	90.7	6.4	6.4	9.5	10.1	4	4	-	-	817948	814730	-	-	-	-
						1.0	0.1	349	27.9		8.0		18.6		90.6		6.4		9.8		4		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	161	27.7	27.7	7.8	7.8	22.0	22.0	77.5	77.7	5.4	5.4	10.6		4		-				-		-	
						3.6	0.1	162	27.7		7.8		22.0		77.9		5.4		10.5		4		-				-		-	
SR7	Cloudy	Moderate	07:16	16.8	Surface	1.0	0.4	56	27.5	27.5	8.0	8.0	21.5	21.5	91.5	91.4	6.4	5.2	1.7	3.0	4	5	-	-	823637	823726	-	-	-	-
						1.0	0.4	59	27.5		8.0		21.5		91.3		6.4		1.7		5		-				-		-	
					Middle	8.4	0.1	245	24.9	24.9	7.8	7.8	30.3	30.3	55.9	55.9	3.9		2.0		5		-				-		-	
						8.4	0.1	246	24.9		7.8		30.4		55.8		3.9		2.0		5		-				-		-	
					Bottom	15.8	0.1	20	24.1	24.1	7.7	7.7	32.3	32.3	48.8	49.0	3.5	3.5	5.2		4		-				-		-	
						15.8	0.1	21	24.1		7.7		32.3		49.1		3.5		5.2		4		-				-		-	
SR8	Cloudy	Moderate	08:41	5.0	Surface	1.0	-	-	29.7	29.7	8.0	8.0	10.5	10.6	102.3	102.2	7.3	7.3	4.5	4.1	6	4	-	-	820387	811628	-	-	-	-
						1.0	-	-	29.6		8.0		10.6		102.1		7.3		4.4		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	4.0	-	-	29.3	29.4	7.9	7.9	15.5	15.5	93.7	93.7	6.6	6.6	3.8		2		-				-		-	
						4.0	-	-	29.4		7.9		15.6		93.6		6.6		3.8		3		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 June 20 during Mid-Flood Tide

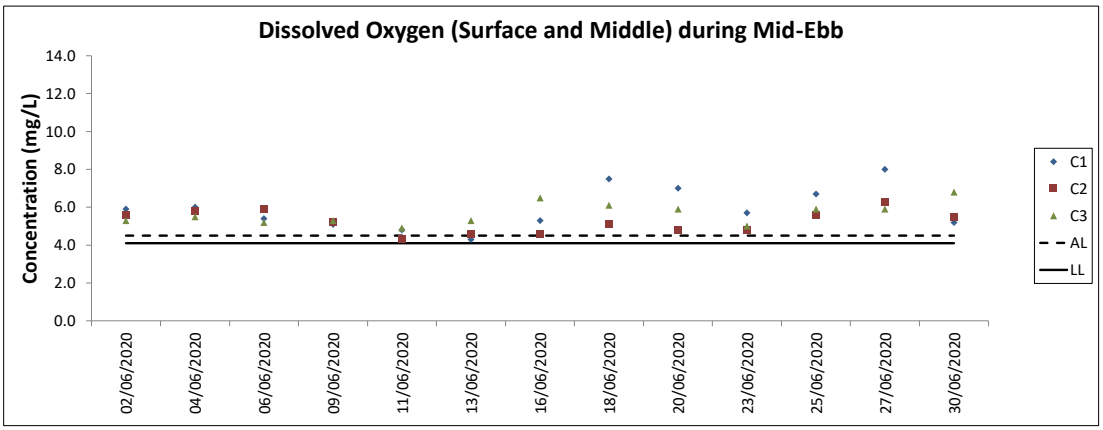
Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
C1	Sunny	Moderate	14:32	8.0	Surface	1.0	0.3	43	30.0	30.0	8.3	8.3	9.8	9.8	98.6	98.0	7.1	5.7	7.2	7.8	4	5	85	89	815623	804248	<0.2	<0.2	0.8	0.8
						1.0	0.3	46	30.0		8.3		9.9		97.3		7.0		7.1		4		85				<0.2		0.8	
					Middle	4.0	0.3	47	26.0	26.0	8.1	8.1	26.1	26.1	60.6	60.6	4.3		7.9		5		89				<0.2		0.9	
						4.0	0.3	48	25.9		8.1		26.1		60.6		4.3		8.0		6		89				<0.2		0.9	
					Bottom	7.0	0.3	34	25.7	25.7	8.1	8.1	28.3	28.3	60.2	60.3	4.2	4.2	8.4		5		92				<0.2		0.8	
						7.0	0.3	36	25.7		8.1		28.4		60.4		4.2		8.4		6		92				<0.2		0.8	
C2	Cloudy	Moderate	13:20	11.0	Surface	1.0	0.6	195	29.3	29.3	7.9	7.9	8.4	8.5	86.1	85.5	6.3	5.1	4.7	8.6	4	4	86	88	825677	806930	<0.2	<0.2	0.9	1.1
						1.0	0.6	197	29.2		7.9		8.5		84.9		6.2		4.6		4		87				<0.2		1.0	
					Middle	5.5	0.2	298	26.4	26.4	7.7	7.7	25.1	25.2	56.0	55.9	3.9		8.1		4		88				<0.2		1.1	
						5.5	0.2	298	26.4		7.7		25.3		55.8		3.9		8.6		5		88				<0.2		1.2	
					Bottom	10.0	0.2	311	26.2	26.2	7.7	7.7	25.8	25.8	56.2	56.4	3.9	3.9	12.3		4		90				<0.2		1.2	
						10.0	0.2	336	26.2		7.7		25.8		56.5		3.9		13.1		4		90				<0.2		1.1	
C3	Cloudy	Moderate	14:58	11.5	Surface	1.0	0.2	237	29.2	29.2	8.2	8.2	15.6	15.6	129.5	129.5	9.1	6.7	2.8	5.0	4	4	87	88	822108	817808	<0.2	<0.2	1.2	1.2
						1.0	0.2	242	29.2		8.2		15.6		129.4		9.1		2.8		5		86				<0.2		1.3	
					Middle	5.8	0.2	213	26.1	26.1	7.7	7.7	26.3	26.2	61.5	61.6	4.3		2.7		4		88				<0.2		1.2	
						5.8	0.2	218	26.1		7.7		26.2		61.7		4.3		3.1		5		89				<0.2		1.3	
					Bottom	10.5	0.4	263	24.5	24.6	7.7	7.7	31.2	31.2	52.1	52.3	3.6	3.7	9.5		4		90				<0.2		1.2	
						10.5	0.4	273	24.6		7.7		31.2		52.5		3.7		9.4		4		90				<0.2		1.2	
IM1	Sunny	Moderate	14:09	4.6	Surface	1.0	0.2	327	29.9	29.9	8.4	8.4	9.9	9.9	113.7	113.6	8.2	8.2	9.2	9.0	6	6	87	90	817940	807111	<0.2	<0.2	1.0	1.1
						1.0	0.2	331	29.8		8.4		9.8		113.5		8.2		9.1		6		86				<0.2		1.1	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.2	282	29.7	29.8	8.4	8.4	15.5	15.8	112.1	112.2	7.8	7.8	8.8		7		93				<0.2		1.2	
						3.6	0.2	285	29.8		8.4		16.2		112.2		7.8		9.0		6		93				<0.2		1.0	
IM2	Sunny	Moderate	14:02	6.6	Surface	1.0	0.7	345	29.8	29.8	8.3	8.3	8.8	8.8	106.6	106.5	7.7	7.2	6.8	7.2	3	3	87	91	818170	806167	<0.2	<0.2	1.1	1.1
						1.0	0.7	317	29.7		8.3		8.8		106.3		7.7		6.8		3		87				<0.2		1.1	
					Middle	3.3	0.4	313	28.9	28.9	8.2	8.2	15.1	15.0	94.9	94.7	6.7		7.2		3		91				<0.2		1.1	
						3.3	0.4	332	28.9		8.2		14.8		94.4		6.7		7.2		3		92				<0.2		1.0	
					Bottom	5.6	0.2	225	25.5	25.5	8.0	8.0	27.4	28.3	55.2	55.1	3.8	3.8	7.7		4		93				<0.2		1.1	
						5.6	0.2	232	25.5		8.0		29.3		54.9		3.8		7.7		4		94				<0.2		1.1	
IM3	Sunny	Moderate	13:51	6.5	Surface	1.0	0.6	324	28.9	28.9	8.2	8.2	14.0	13.8	103.9	103.9	7.4	6.7	5.5	6.3	3	3	87	90	818799	805594	<0.2	<0.2	1.2	1.2
						1.0	0.6	346	28.8		8.2		13.7		103.9		7.5		5.6		3		87				<0.2		1.1	
					Middle	3.3	0.5	290	27.5	27.5	8.1	8.1	21.5	21.5	85.7	85.6	6.0		5.6		3		91				<0.2		1.2	
						3.3	0.5	296	27.5		8.1		21.5		85.4		6.0		5.7		3		90				<0.2		1.1	
					Bottom	5.5	0.3	266	25.7	25.7	8.1	8.1	28.3	28.3	56.7	56.6	3.9	3.9	7.6		3		93				<0.2		1.2	
						5.5	0.3	277	25.7		8.1		28.3		56.4		3.9		7.5		4		94				<0.2		1.1	
IM4	Sunny	Moderate	13:40	7.8	Surface	1.0	0.5	304	28.1	28.1	8.3	8.3	19.2	19.2	106.6	106.6	7.5	6.9	3.7	5.7	4	3	87	90	819736	804583	<0.2	<0.2	1.1	1.2
						1.0	0.5	315	28.1		8.3		19.2		106.5		7.5		3.7		3		87				<0.2		1.2	
					Middle	3.9	0.5	302	27.5	27.5	8.2	8.2	21.7	21.7	90.4	90.2	6.3		5.7		4		90				<0.2		1.2	
						3.9	0.5	309	27.5		8.2		21.7		89.9		6.3		5.8		3		90				<0.2		1.2	
					Bottom	6.8	0.4	317	25.6	25.6	8.1	8.1	28.7	28.7	59.8	60.1	4.2	4.2	7.6		3		93				<0.2		1.2	
						6.8	0.4	337	25.6		8.1		28.7		60.3		4.2		7.7		3		94				<0.2		1.2	
IM5	Sunny	Moderate	13:32	7.0	Surface	1.0	0.4	265	30.1	30.1	8.3	8.3	9.5	9.5	107.3	107.1	7.7	6.7	5.8	7.1	3	4	87	90	820753	804862	<0.2	<0.2	1.2	1.2
						1.0	0.5	279	30.1		8.3		9.5		106.8		7.7		6.1		4		87				<0.2		1.2	
					Middle	3.5	0.3	310	27.9	28.0	8.1	8.1	18.6	18.6	80.2	80.2	5.7		7.0		4		91				<0.2		1.2	
						3.5	0.3	328	28.0		8.1		18.5		80.1		5.7		7.1		4		91				<0.2		1.2	
					Bottom	6.0	0.3	2	26.0	26.0	8.1	8.1	27.8	27.8	62.6	63.0	4.4	4.4	8.4		4		93				<0.2		1.2	
						6.0	0.3	2	26.0		8.1		27.8		63.4		4.4		8.3		4		92				<0.2		1.2	
IM6	Sunny	Moderate	13:26	6.9	Surface	1.0	0.6	258	29.9	29.9	8.3	8.3	8.3	8.3	108.1	108.0	7.8	7.6	5.4	6.3	4	4	88	91	821070	805808	<0.2	<0.2	1.1	1.2
						1.0	0.6	270	29.8		8.3		8.3		107.8		7.8		5.3		4		87				<0.2		1.2	
					Middle	3.5	0.5	248	29.3	29.3	8.2	8.2	10.1	10.1	103.5	101.8	7.5		5.2		4		91				<0.2		1.2	
						3.5	0.5	267	29.2		8.2		10.2		100.1		7.3		5.3		4		92				<0.2		1.2	
					Bottom	5.9	0.3	231	27.8	27.9	8.1	8.1	19.8	19.8	74.8	74.9	5.3	5.3	8.6		4		93				<0.2		1.2	
						5.9	0.3	236	27.9		8.1		19.8		74.9		5.3		8.3		4		93				<0.2		1.2	
IM7	Sunny	Moderate	13:20	7.9	Surface	1.0	0.5	250	30.0	30.0	8.2	8.2	8.1	8.0	98.1	98.0	7.1	6.7	6.4	7.3	3	3	87	91	821353	806815	<0.2	<0.2	1.2	1.2
						1.0	0.5	251	30.0		8.2		8.0		97.9		7.1		6.4		3		88				<0.2		1.2	
					Middle	4.0	0.6	253	29.3	29.4	8.2	8.2	10.1	10.1	86.8	86.3	6.3		7.0		4		92				<0.2		1.2	
						4.0	0.6	260	29.4		8.2		10.0		85.8		6.2		7.0		3		91				<0.2		1.2	
					Bottom	6.9	0.1	232	26.7	26.7	8.0	8.0	25.0	24.9	60.6	61.0	4.2	4.3	8.5		4		94				<0.2		1.1	
						6.9	0.1	254	26.7		8.0		24.9		61.4		4.3		8.4		3		94				<0.2		1.2	
IM8	Cloudy	Moderate	13:39	6.3	Surface	1.0	0.2	201	30.3	30.3	8.0	8.0	6.6	6.5	102.0	102.0	7.4	7.4	5.7	7.1	2	3	86	88	821850	808143	<0.2	<0.2	1.4	1.3
						1.0	0.2	219	30.3		8.0		6.5		101.9		7.4		5.7		3		85				<0.2		1.3	
					Middle	3.2	0.2	248	30.1	30.1	7.9	7.9	7.6	7.7	100.9	100.9	7.3		6.0		2		88				<0.2		1.2	
						3.2	0.2	251	30.0		7.9		7.7		100.9		7.3		6.2		3		89				<0.2		1.1	
					Bottom	5.3	0.3	221	29.0	29.0	7.9	7.9	10.7	11.0	96.1	94.4	7.0	6.9	9.6		3		90				<0.2		1.3	
						5.3	0.4	221	29.0		7.9		11.3		92.7		6.7		9.7		3		90				<0.2		1.2	

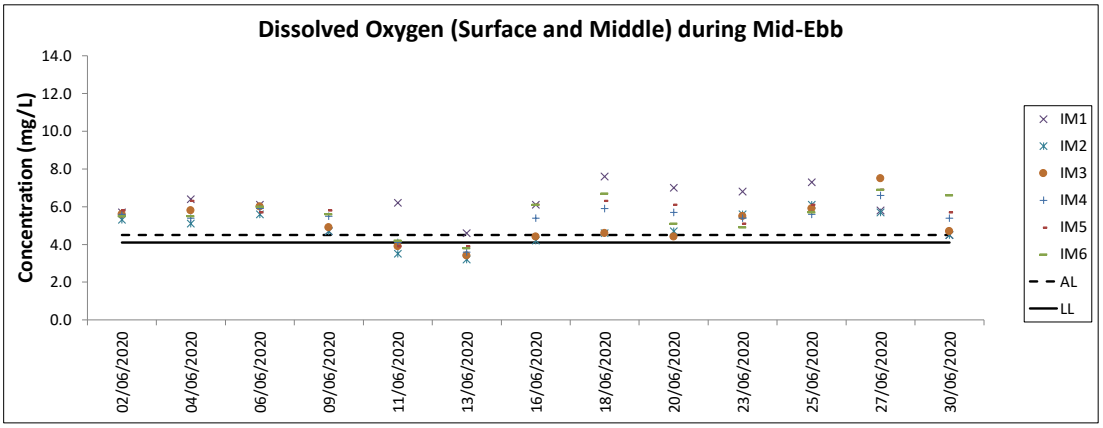
DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**

Expansion of Hong Kong International Airport into a Three-Runway System
Water Quality Monitoring
Water Quality Monitoring Results on 30 June 20 during Mid-Flood Tide

Monitoring Station	Weather Condition	Sea Condition	Sampling Time	Water Depth (m)	Sampling Depth (m)		Current Speed (m/s)	Current Direction	Water Temperature (°C)		pH		Salinity (ppt)		DO Saturation (%)		Dissolved Oxygen		Turbidity(NTU)		Suspended Solids (mg/L)		Total Alkalinity (ppm)		Coordinate HK Grid (Northing)	Coordinate HK Grid (Easting)	Chromium (µg/L)		Nickel (µg/L)	
									Value	Average	Value	Average	Value	Average	Value	Average	Value	DA	Value	DA	Value	DA	Value	DA			Value	DA	Value	DA
IM9	Cloudy	Moderate	13:44	6.2	Surface	1.0	0.0	201	30.4	30.4	8.0	8.0	6.9	6.9	102.4	102.4	7.4	7.2	5.4	5.8	3	2	86	88	822076	808802	<0.2	<0.2	1.2	1.2
						1.0	0.0	202	30.3		8.0		7.0		102.3		7.4		5.3		2		86				<0.2		1.3	
					Middle	3.1	0.1	303	30.0	30.0	8.0	7.9	8.3	8.4	95.8	95.3	6.9		5.6		3		88				<0.2		1.2	
						3.1	0.1	318	30.0		7.9		8.4		94.8		6.9		5.6		2		90				<0.2		1.2	
					Bottom	5.2	0.2	232	28.6	28.6	7.8	7.8	15.9	15.9	83.0	83.0	5.9	5.9	6.3		<2		90				<0.2		1.3	
						5.2	0.2	238	28.6		7.8		15.9		82.9		5.9		6.4		<2		90				<0.2		1.2	
IM10	Cloudy	Moderate	13:50	6.3	Surface	1.0	0.1	250	30.3	30.3	8.0	8.0	8.1	8.1	106.6	106.6	7.7	7.4	4.8	5.1	2	3	87	88	822370	809778	<0.2	<0.2	1.1	1.2
						1.0	0.1	272	30.2		8.0		8.1		106.5		7.7		4.8		2		86				<0.2		1.1	
					Middle	3.2	0.2	299	29.5	29.5	8.0	8.0	12.4	12.4	98.6	98.4	7.0		4.2		2		88				<0.2		1.3	
						3.2	0.2	300	29.5		8.0		12.3		98.2		7.0		4.2		3		88				<0.2		1.2	
					Bottom	5.3	0.3	281	28.0	28.0	7.8	7.8	14.7	15.2	81.9	80.5	5.9	5.8	6.3		3		90				<0.2		1.3	
						5.3	0.3	289	28.0		7.8		15.6		79.0		5.7		6.5		3		90				<0.2		1.3	
IM11	Cloudy	Moderate	14:00	6.6	Surface	1.0	0.1	242	30.0	30.0	8.0	8.0	10.1	10.0	104.3	104.3	7.5	7.0	4.5	4.6	2	2	86	88	822070	811481	<0.2	<0.2	1.2	1.3
						1.0	0.1	261	30.0		8.0		10.0		104.2		7.5		4.4		2		87				<0.2		1.1	
					Middle	3.3	0.3	297	29.3	29.4	8.0	8.0	13.0	13.0	92.4	91.2	6.6		4.3		2		88				<0.2		1.4	
						3.3	0.3	325	29.4		8.0		13.0		89.9		6.4		4.3		2		88				<0.2		1.3	
					Bottom	5.6	0.5	278	27.4	27.4	7.7	7.7	19.4	20.4	72.7	72.8	5.2	5.2	5.1		3		90				<0.2		1.2	
						5.6	0.6	285	27.3		7.7		21.4		72.8		5.1		5.1		3		90				<0.2		1.4	
IM12	Cloudy	Moderate	14:06	8.3	Surface	1.0	0.2	301	29.9	29.9	8.1	8.1	11.6	11.6	114.0	113.8	8.1	7.5	3.5	5.5	2	3	87	88	821480	812062	<0.2	<0.2	1.2	1.3
						1.0	0.2	326	29.8		8.1		11.6		113.5		8.1		3.6		3		86				<0.2		1.4	
					Middle	4.2	0.4	286	28.7	28.7	8.0	8.0	16.5	16.5	98.3	98.0	6.9		3.7		3		88				<0.2		1.2	
						4.2	0.4	291	28.7		8.0		16.5		97.7		6.9		3.8		2		87				<0.2		1.3	
					Bottom	7.3	0.3	285	25.8	25.8	7.7	7.7	27.2	27.3	61.1	61.2	4.3	4.3	9.1		3		90				<0.2		1.3	
						7.3	0.3	290	25.7		7.7		27.5		61.2		4.3		9.1		3		90				<0.2		1.2	
SR1A	Cloudy	Moderate	14:24	4.8	Surface	1.0	-	-	30.0	30.0	8.2	8.2	12.3	12.3	133.6	133.6	9.5	9.5	3.2	3.4	4	3	-	-	819975	812654	-	-	-	-
						1.0	-	-	29.9		8.2		12.3		133.6		9.5		3.2		3		-				-		-	
					Middle	2.4	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						2.4	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	29.8	29.8	8.2	8.2	14.2	14.2	131.5	130.7	9.2	9.2	3.5		2		-				-		-	
						3.8	-	-	29.8		8.2		14.2		129.9		9.1		3.6		3		-				-		-	
SR2	Cloudy	Moderate	14:36	3.8	Surface	1.0	0.2	168	29.8	29.8	8.1	8.1	11.6	11.6	120.2	120.2	8.6	8.6	3.9	4.0	3	3	88	89	821485	814161	<0.2	<0.2	0.9	1.1
						1.0	0.2	183	29.7		8.1		11.6		120.1		8.6		4.0		2		87				<0.2		0.8	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.8	0.1	147	29.2	29.3	8.0	8.0	16.4	16.8	108.0	107.9	7.6	7.6	4.1		3		89				<0.2		1.4	
						2.8	0.1	149	29.3		8.0		17.2		107.7		7.5		4.1		3		90				<0.2		1.3	
SR3	Cloudy	Moderate	13:35	8.6	Surface	1.0	0.2	209	29.7	29.7	8.0	8.0	9.0	9.0	97.4	97.3	7.1	6.3	4.2	7.2	3	3	-	-	822138	807569	-	-	-	-
						1.0	0.2	214	29.6		8.0		9.0		97.1		7.0		4.2		3		-				-		-	
					Middle	4.3	0.2	253	28.8	28.8	7.8	7.8	13.5	13.5	78.6	78.1	5.6		7.2		3		-				-		-	
						4.3	0.2	258	28.8		7.8		13.5		77.6		5.6		7.7		2		-				-		-	
					Bottom	7.6	0.3	217	26.6	26.6	7.7	7.7	24.5	24.7	60.9	61.4	4.3	4.3	10.0		2		-				-		-	
						7.6	0.3	231	26.6		7.7		24.8		61.9		4.3		10.1		2		-				-		-	
SR4A	Sunny	Calm	14:50	9.0	Surface	1.0	0.1	58	30.2	30.2	8.4	8.4	11.4	11.3	127.3	127.4	9.0	9.1	9.4	7.9	7	7	-	-	817171	807825	-	-	-	-
						1.0	0.1	59	30.2		8.4		11.3		127.5		9.0		9.2		8		-				-		-	
					Middle	4.5	0.1	257	29.6	29.6	8.4	8.4	16.8	16.8	131.3	131.2	9.1		6.5		7		-				-		-	
						4.5	0.1	267	29.6		8.4		16.8		131.1		9.1		6.5		8		-				-		-	
					Bottom	8.0	0.1	257	26.1	26.1	8.1	8.1	27.3	27.3	58.5	58.7	4.1	4.1	7.9		7		-				-		-	
						8.0	0.1	265	26.1		8.1		27.3		58.9		4.1		7.8		7		-				-		-	
SR5A	Sunny	Calm	15:06	3.6	Surface	1.0	0.1	233	29.9	29.9	8.5	8.5	16.6	16.6	144.6	144.4	10.0	10.0	6.8	6.2	5	5	-	-	816591	810674	-	-	-	-
						1.0	0.1	253	29.8		8.5		16.7		144.1		10.0		6.9		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	2.6	0.1	236	29.5	29.5	8.5	8.5	17.1	17.1	128.8	128.7	8.9	8.9	5.5		5		-				-		-	
						2.6	0.1	241	29.5		8.5		17.1		128.5		8.9		5.5		5		-				-		-	
SR6A	Sunny	Calm	15:42	4.6	Surface	1.0	0.1	286	30.3	30.3	8.7	8.7	14.1	14.1	159.4	159.1	11.1	11.1	5.1	6.4	5	5	-	-	817968	814760	-	-	-	-
						1.0	0.1	304	30.3		8.7		14.2		158.8		11.0		5.5		5		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.6	0.1	181	28.9	28.9	8.3	8.3	18.4	18.4	105.4	105.7	7.3	7.4	7.6		4		-				-		-	
						3.6	0.1	197	28.9		8.3		18.4		106.0		7.4		7.4		5		-				-		-	
SR7	Cloudy	Moderate	15:33	16.5	Surface	1.0	0.1	334	27.4	27.4	8.0	8.0	22.4	22.5	99.0	98.8	6.9	5.9	1.9	2.5	2	2	-	-	823657	823725	-	-	-	-
						1.0	0.1	359	27.3		8.0		22.6		98.6		6.9		2.0		2		-				-		-	
					Middle	8.3	0.1	346	25.8	25.8	7.8	7.8	27.6	27.6	71.9	71.4	5.0		2.4		2		-				-		-	
						8.3	0.1	350	25.8		7.8		27.6		70.9		4.9		2.5		3		-				-		-	
					Bottom	15.5	0.2	120	24.4	24.4	7.8	7.8	31.8	31.8	54.7	54.9	3.8	3.8	3.0		3		-				-		-	
						15.5	0.2	122	24.4		7.8		31.8		55.1		3.8		3.0		2		-				-		-	
SR8	Cloudy	Moderate	14:15	4.8	Surface	1.0	-	-	30.0	30.0	8.2	8.2	12.1	12.1	120.8	120.7	8.6	8.6	4.1	5.2	2	3	-	-	820401	811624	-	-	-	-
						1.0	-	-	30.0		8.2		12.1		120.6		8.5		4.3		2		-				-		-	
					Middle	-	-	-	-	-	-	-	-	-	-	-	-		-		-		-				-		-	
						-	-	-	-		-		-		-		-		-		-		-				-		-	
					Bottom	3.8	-	-	29.5	29.5	8.0	8.0	13.3	13.3	103.9	104.6	7.4	7.5	6.1		3		-				-		-	
						3.8	-	-	29.5		8.0		13.3		105.3		7.5		6.2		4		-				-		-	

DA: Depth-Averaged
Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
Value exceeding Action Level is underlined; **Value exceeding Limit Level is bolded and underlined**


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
23/06/2020
25/06/2020
27/06/2020
30/06/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
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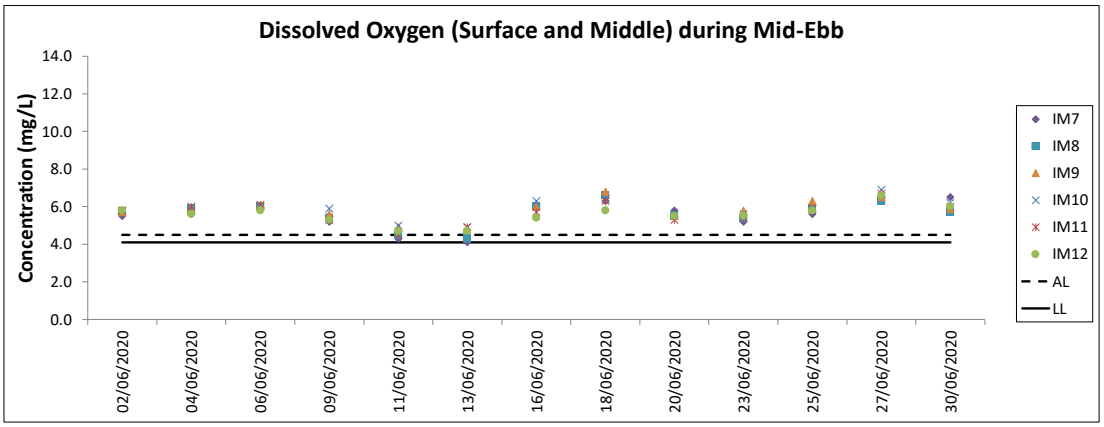
27/06/2020
30/06/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
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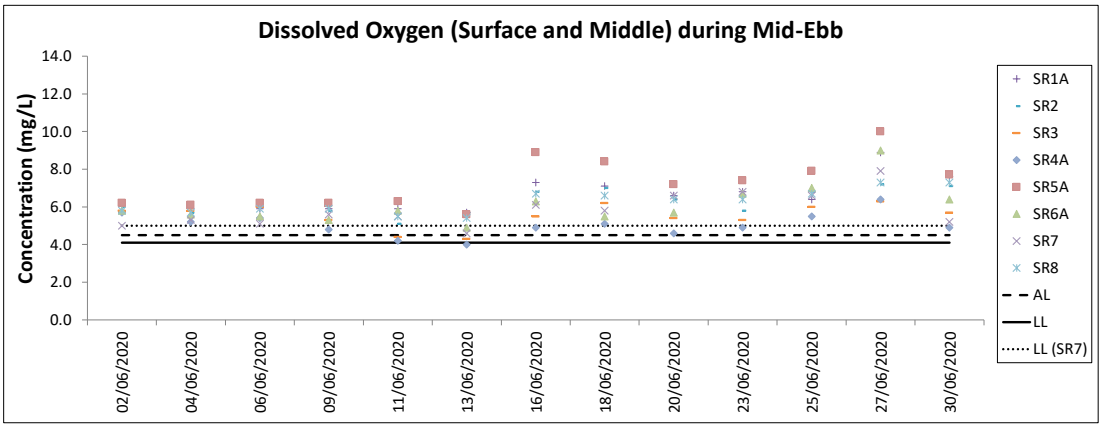
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
23/06/2020
25/06/2020
27/06/2020
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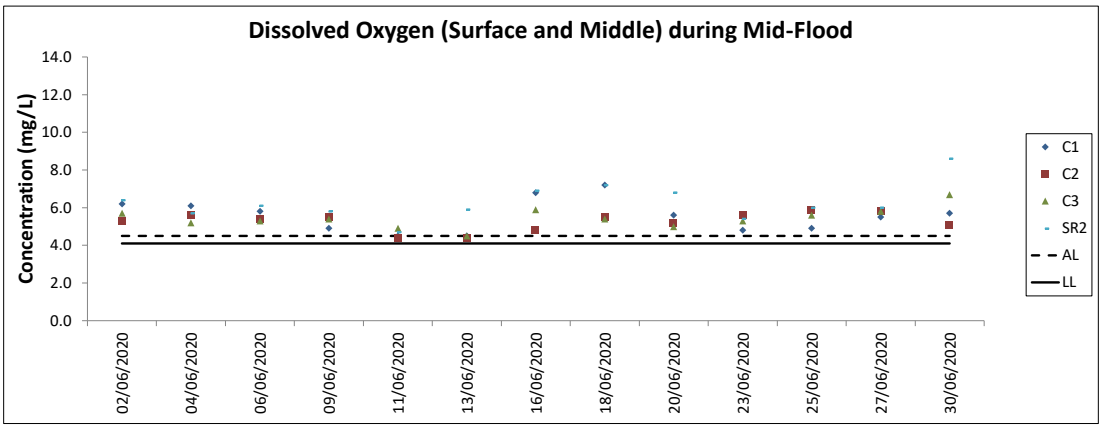
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
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12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
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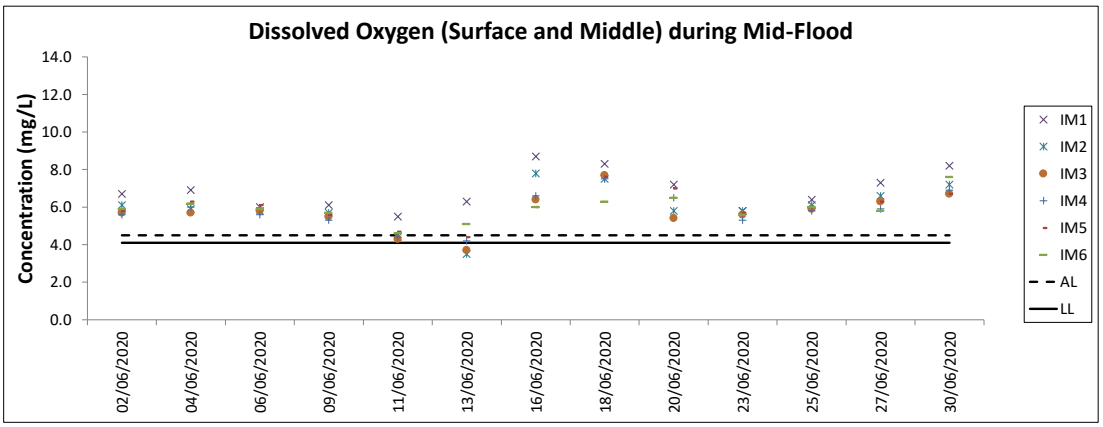
30/06/2020
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
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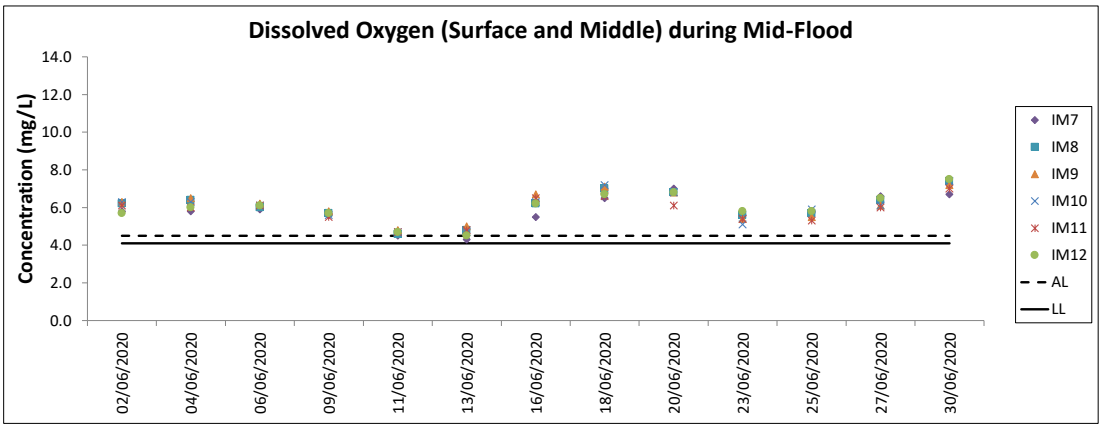
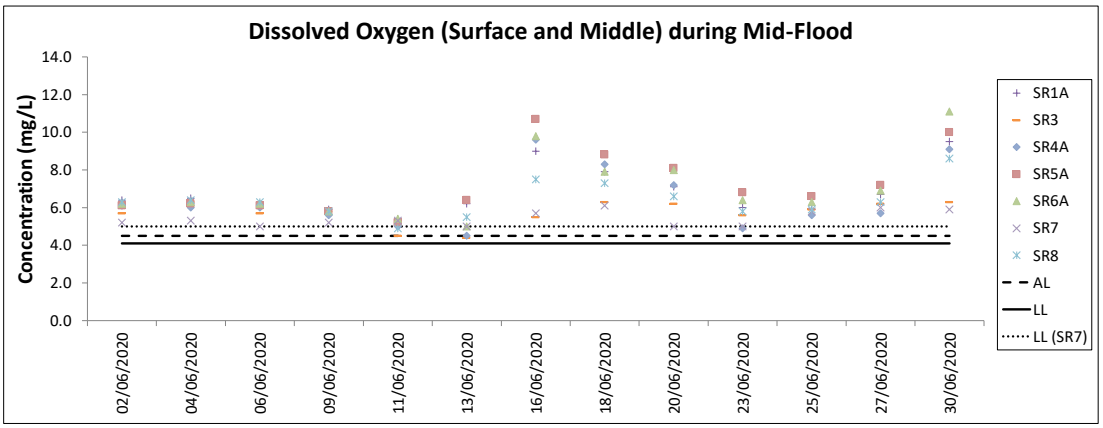
27/06/2020
30/06/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
23/06/2020
25/06/2020
27/06/2020
30/06/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Surface and Middle) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
23/06/2020
25/06/2020
27/06/2020
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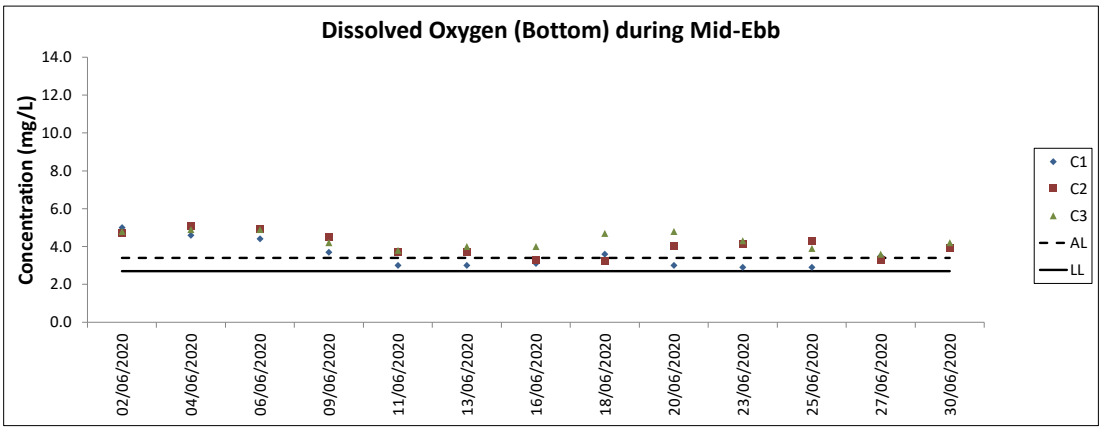
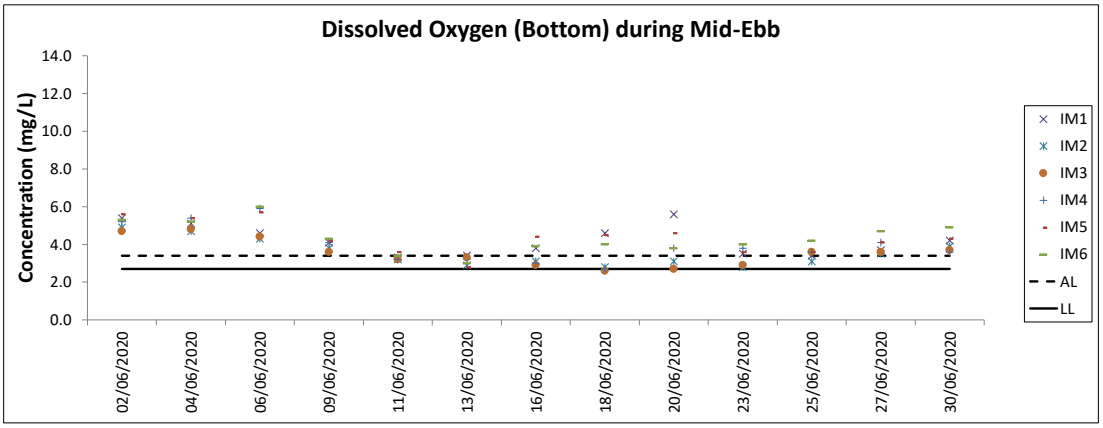
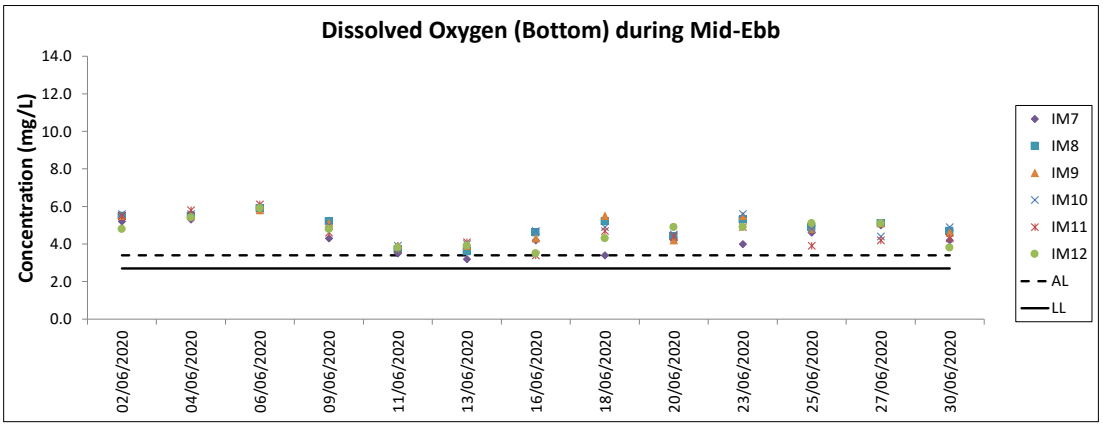
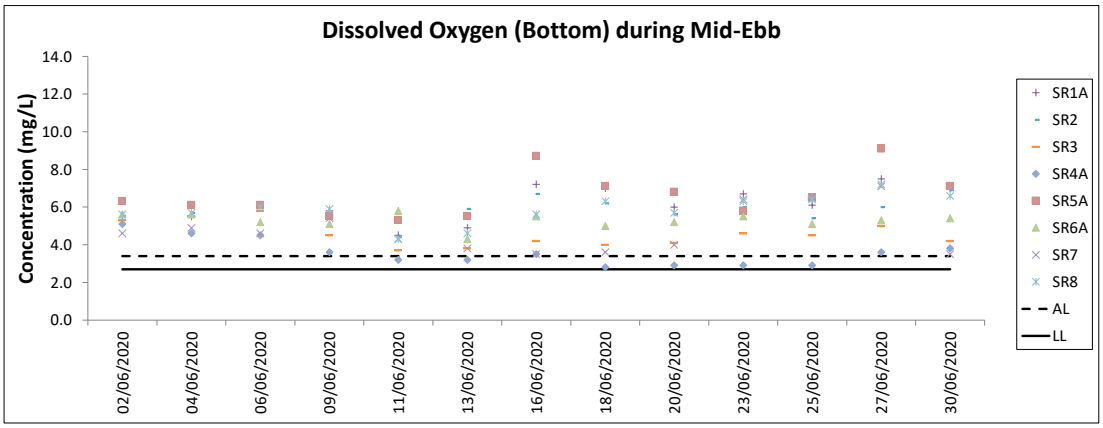
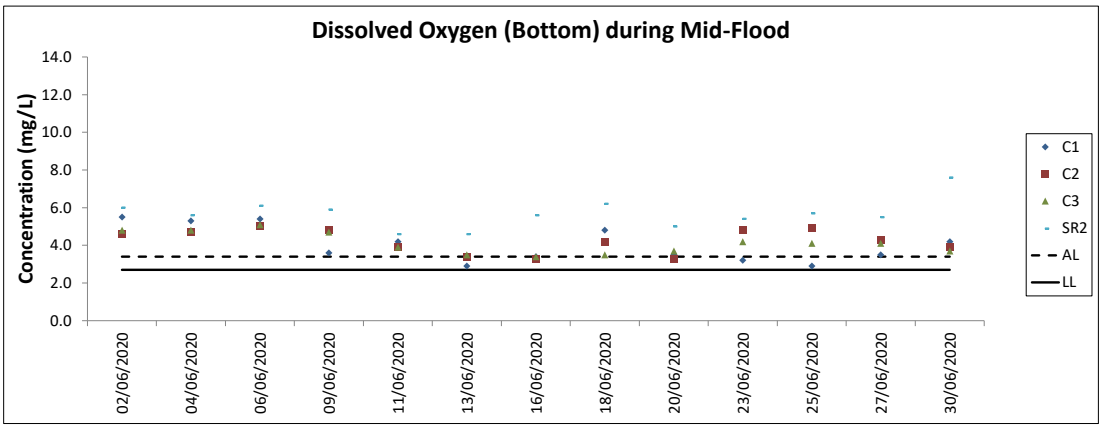
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL
LL (SR7)


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
23/06/2020
25/06/2020
27/06/2020
30/06/2020
C1
C2
C3
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
23/06/2020
25/06/2020
27/06/2020
30/06/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
23/06/2020
25/06/2020
27/06/2020
30/06/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Ebb
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
23/06/2020
25/06/2020
27/06/2020
30/06/2020
SR1A
SR2
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
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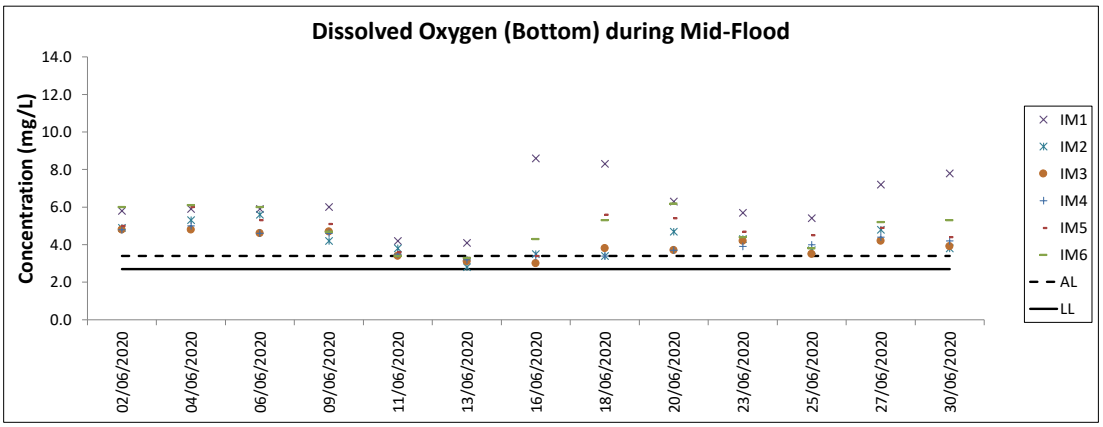
30/06/2020
C1
C2
C3
SR2
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
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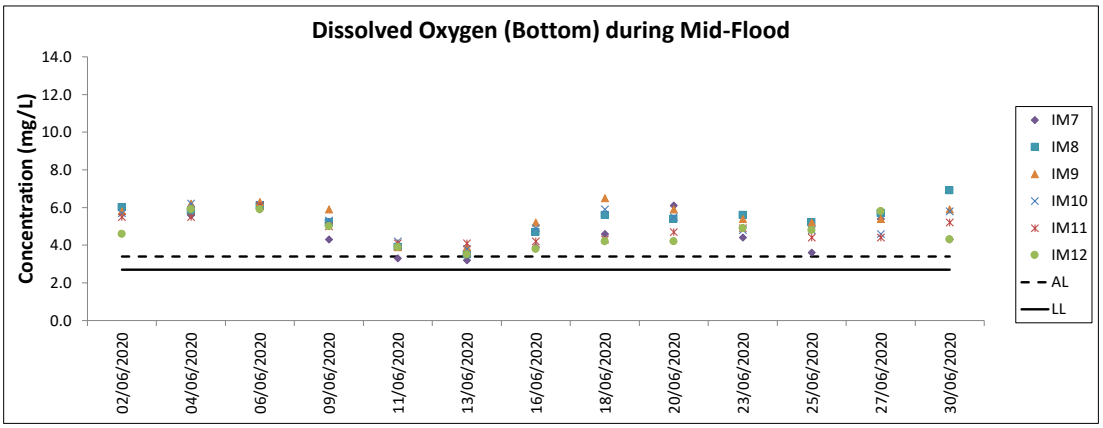
27/06/2020
30/06/2020
IM1
IM2
IM3
IM4
IM5
IM6
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
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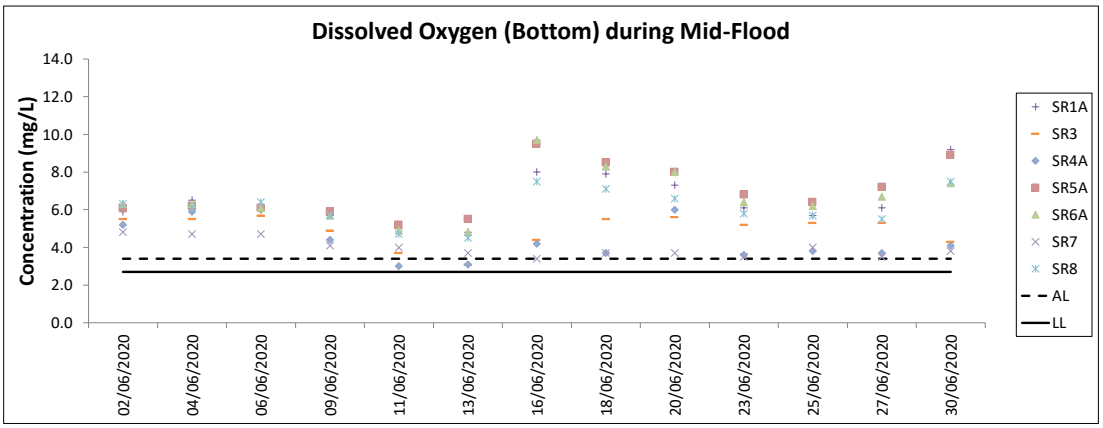
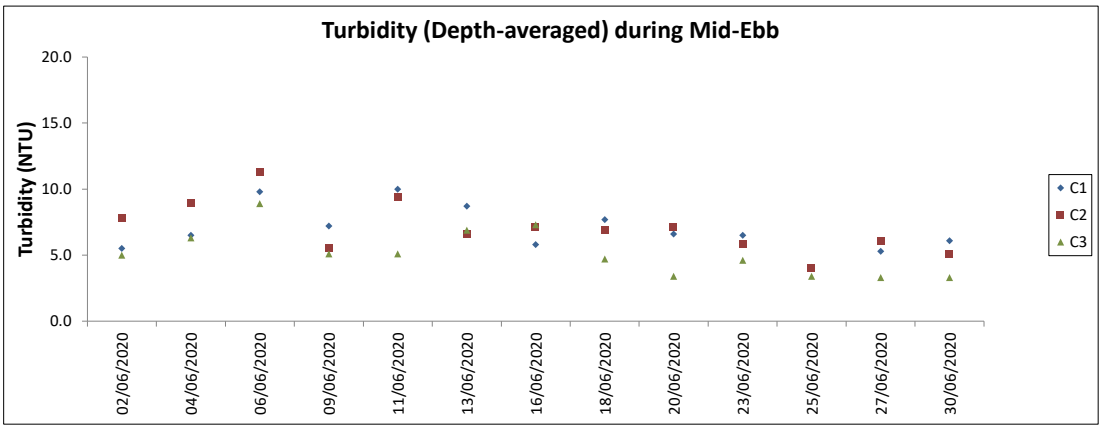
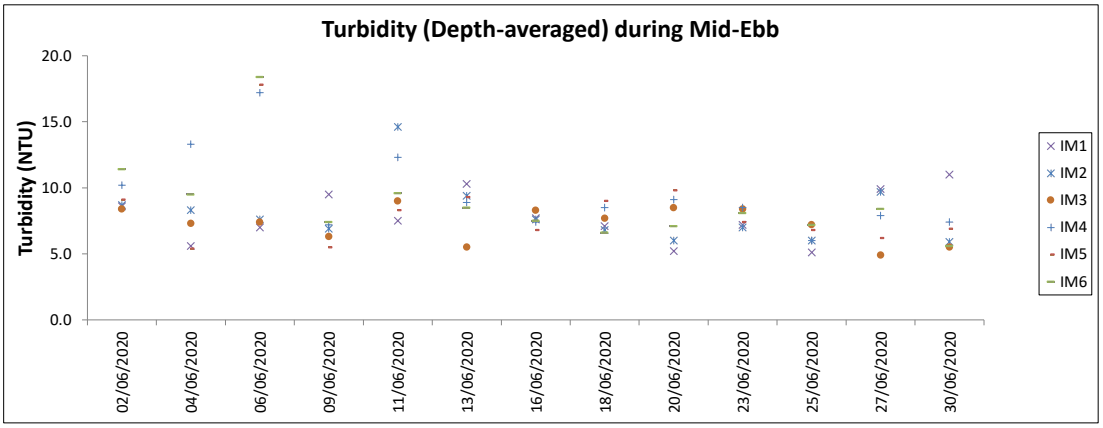
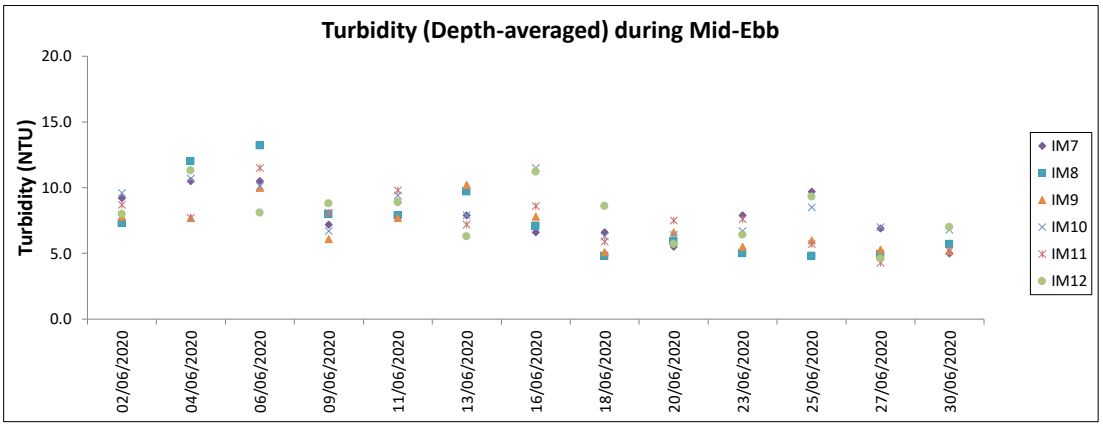
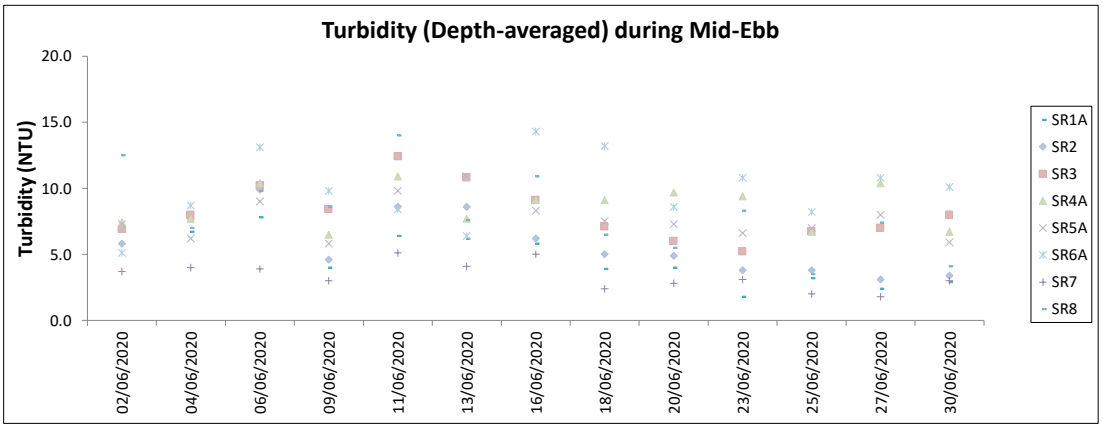
27/06/2020
30/06/2020
IM7
IM8
IM9
IM10
IM11
IM12
AL
LL


Dissolved Oxygen (Bottom) during Mid-Flood
Concentration (mg/L)
14.0
12.0
10.0
8.0
6.0
4.0
2.0
0.0
02/06/2020
04/06/2020
06/06/2020
09/06/2020
11/06/2020
13/06/2020
16/06/2020
18/06/2020
20/06/2020
23/06/2020
25/06/2020
27/06/2020
30/06/2020
SR1A
SR3
SR4A
SR5A
SR6A
SR7
SR8
AL
LL

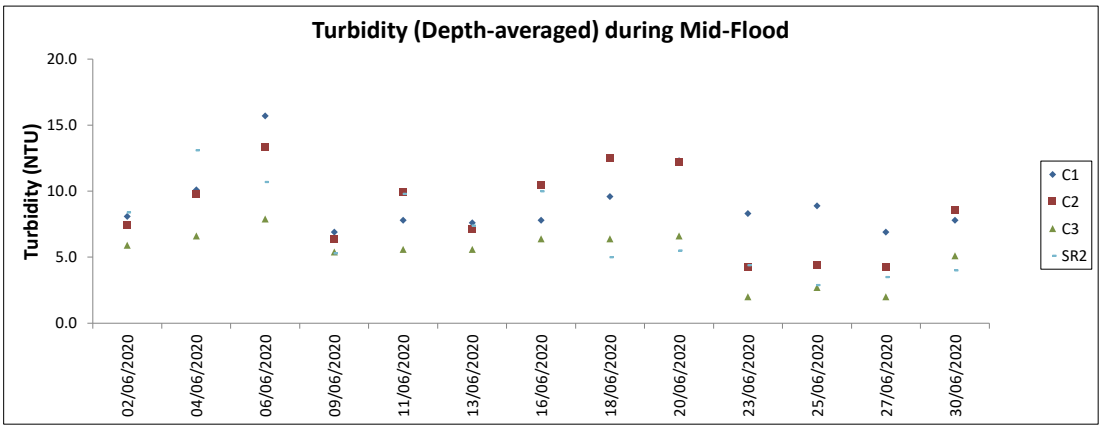


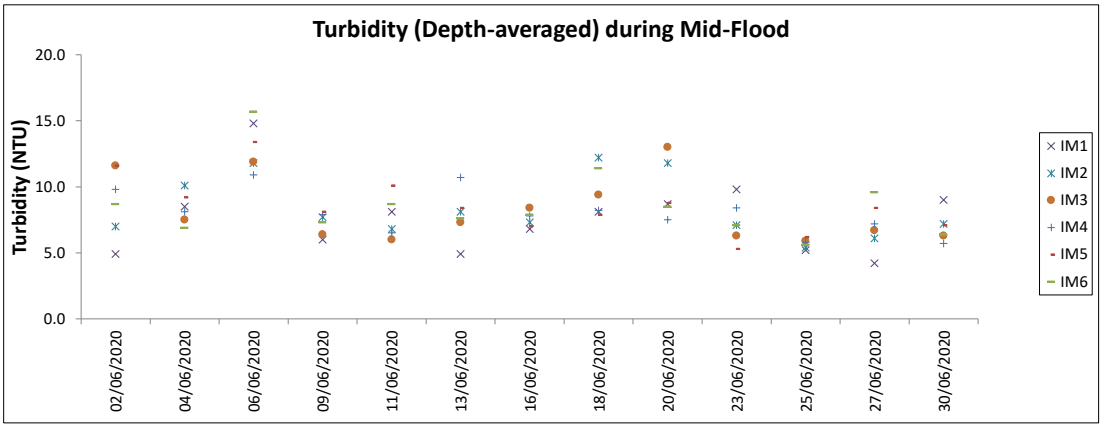


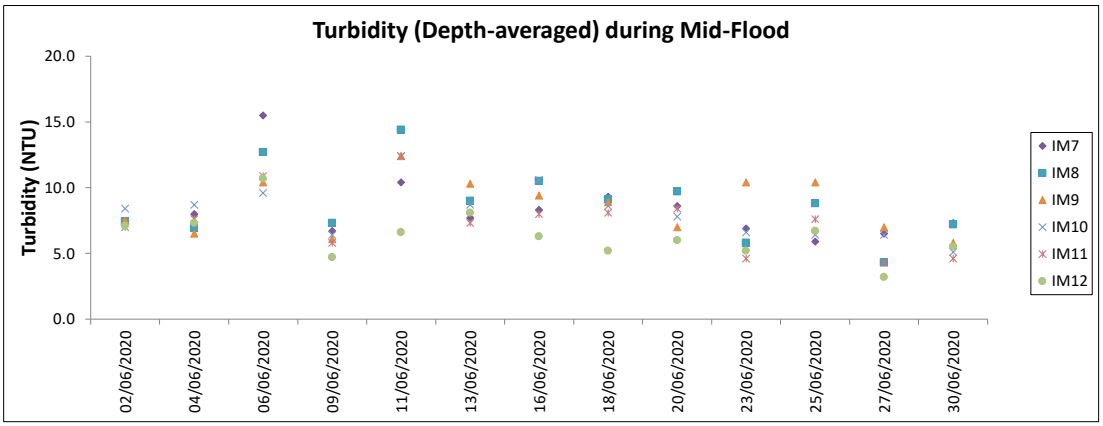


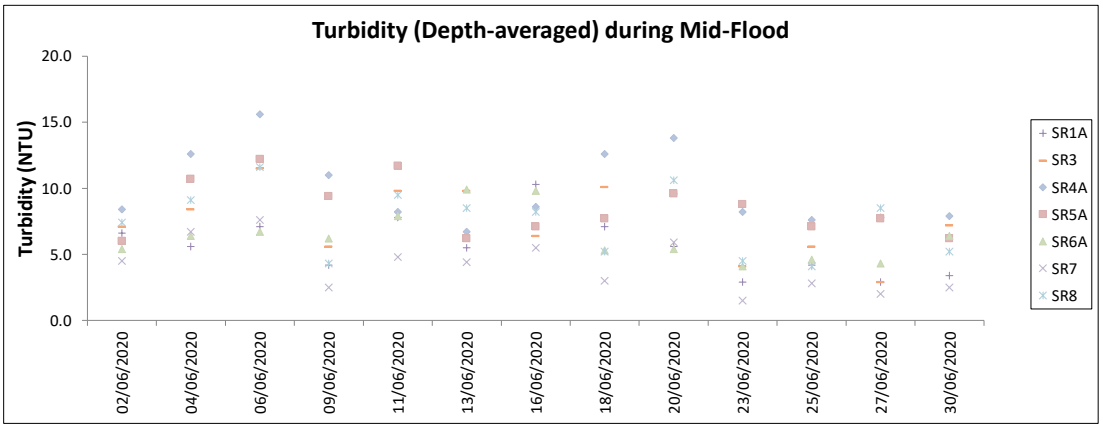


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

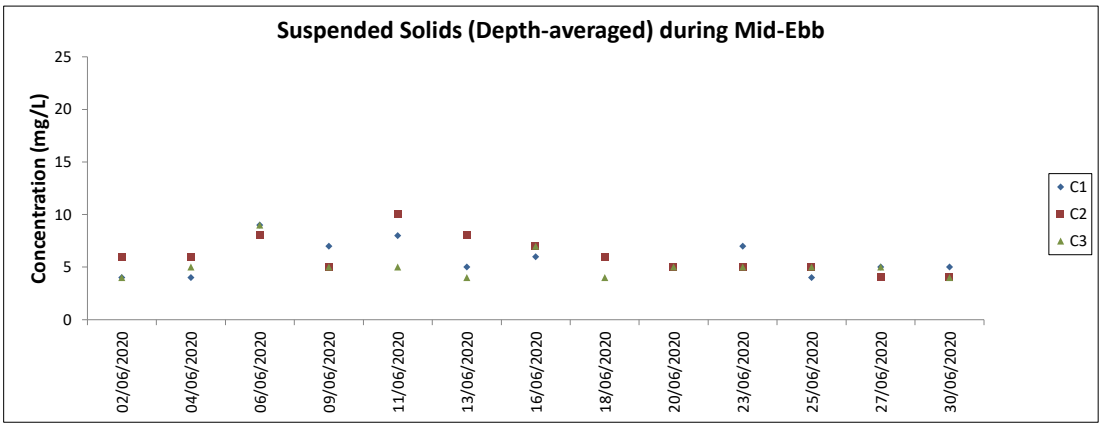


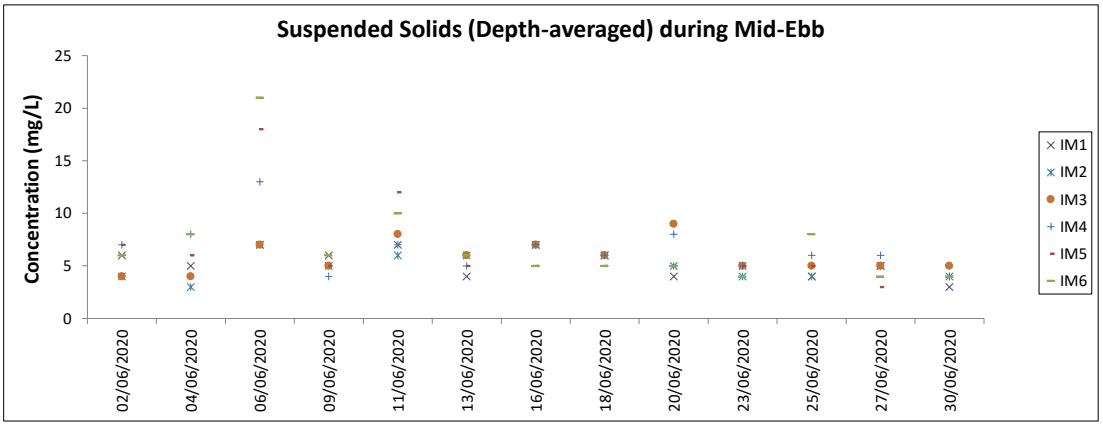


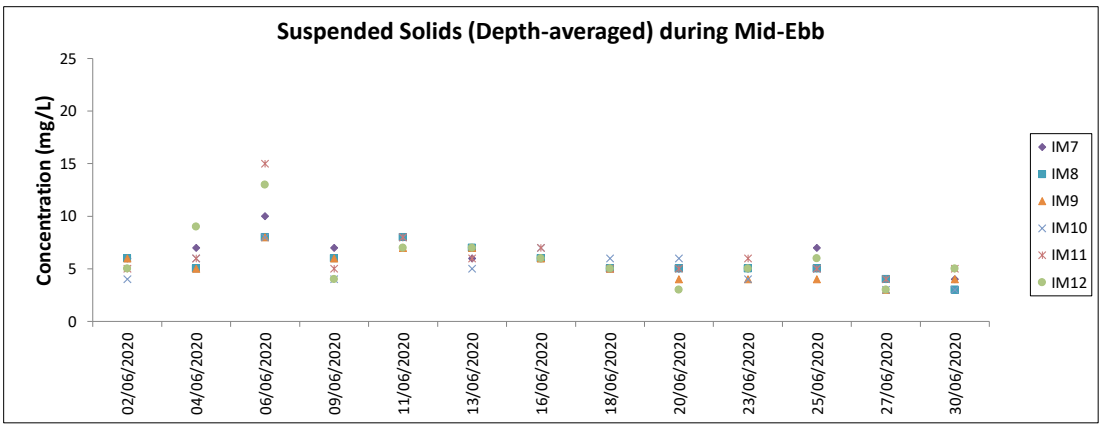


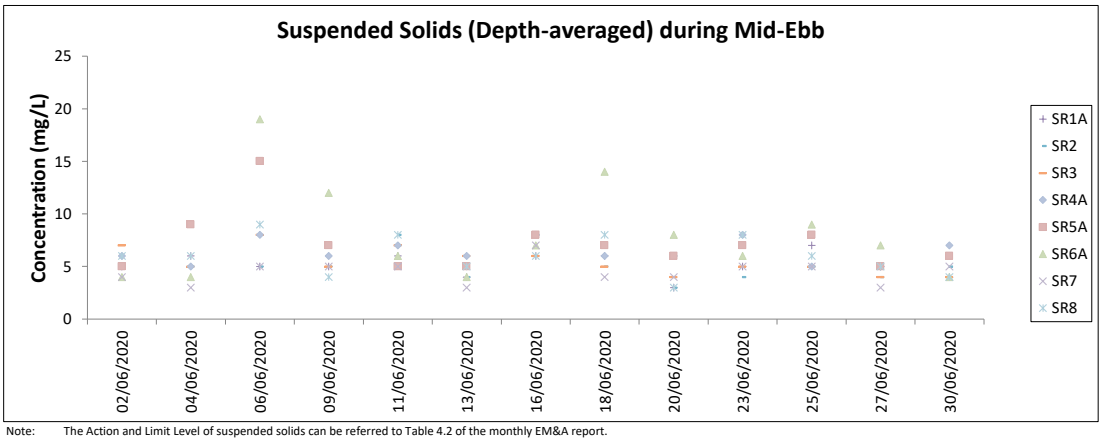


Note: The Action and Limit Level of turbidity can be referred to Table 4.2 of the monthly EM&A report.

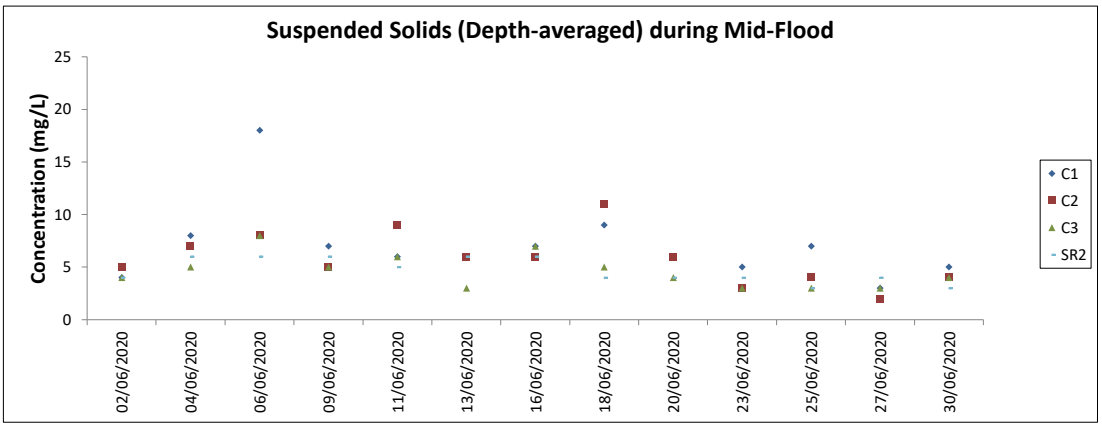


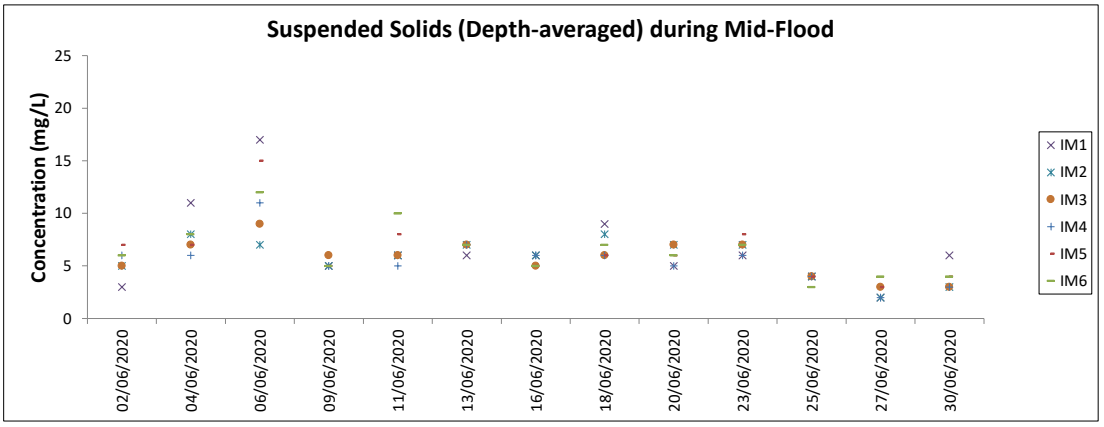


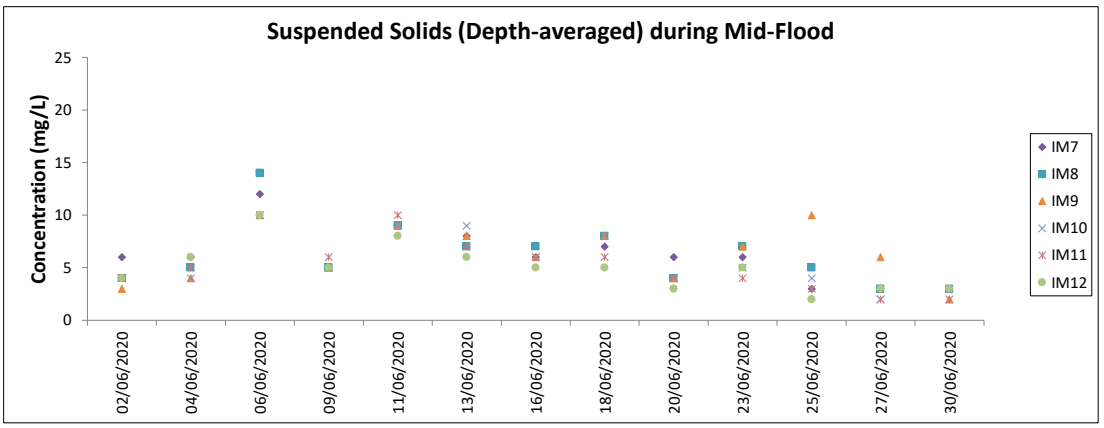


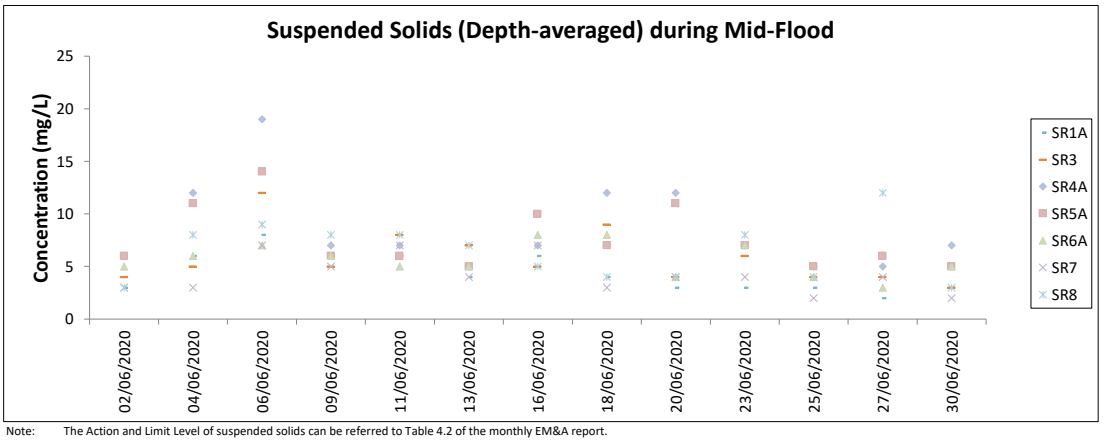


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

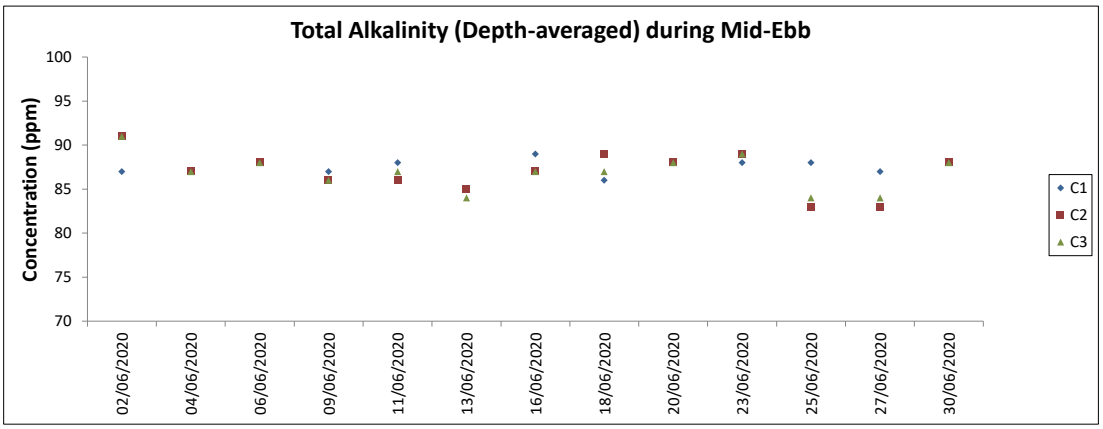


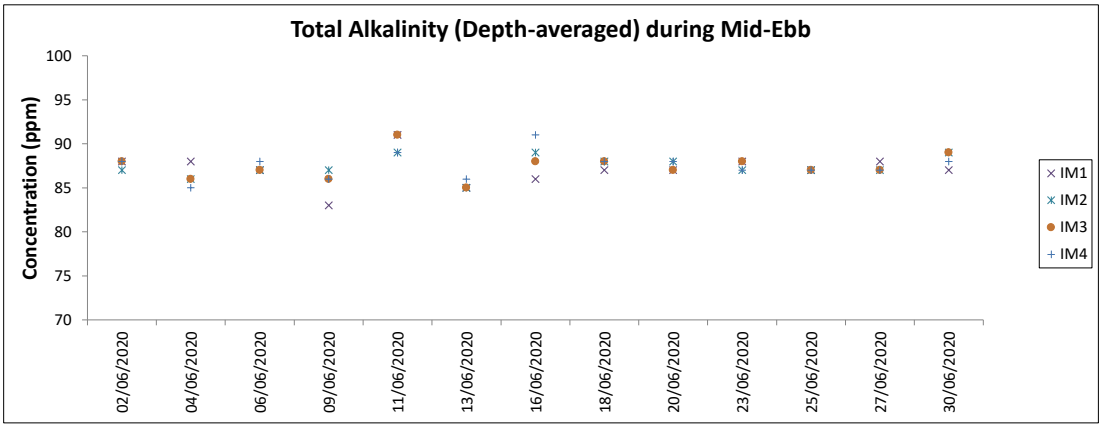


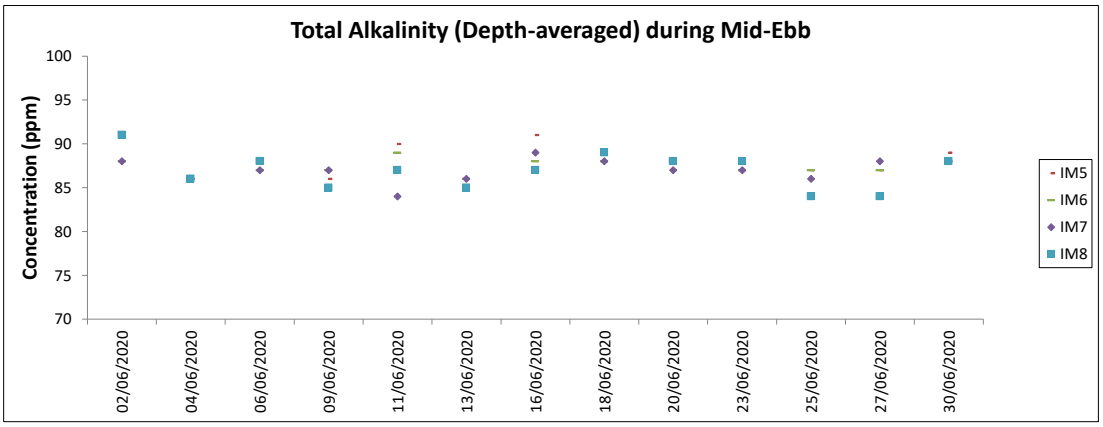


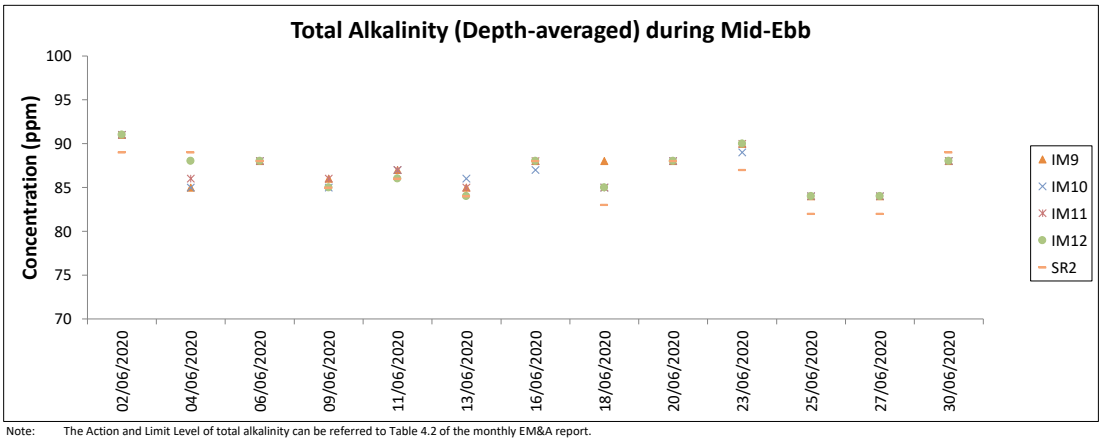


Note: The Action and Limit Level of suspended solids can be referred to Table 4.2 of the monthly EM&A report.

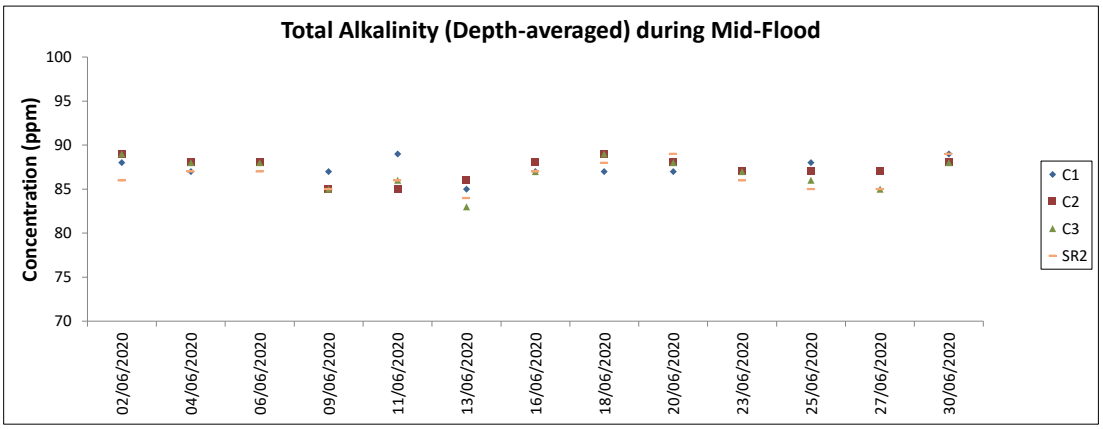


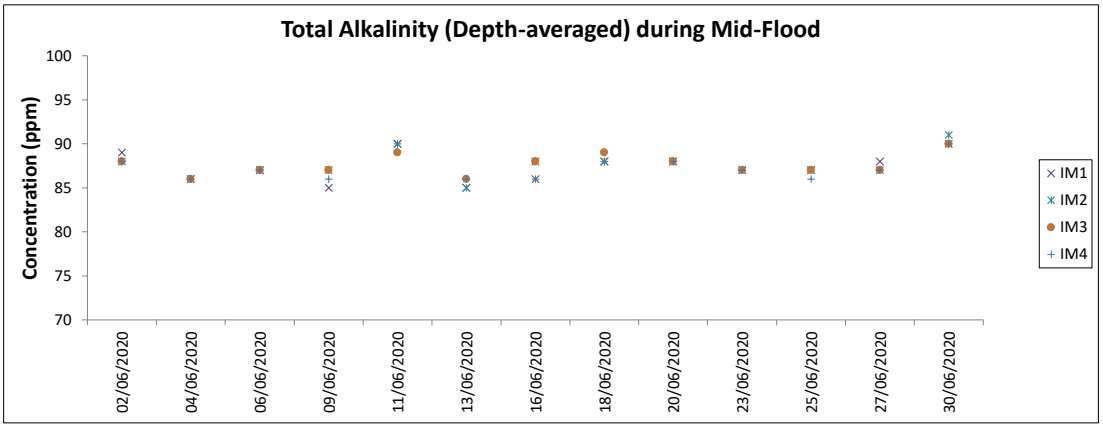


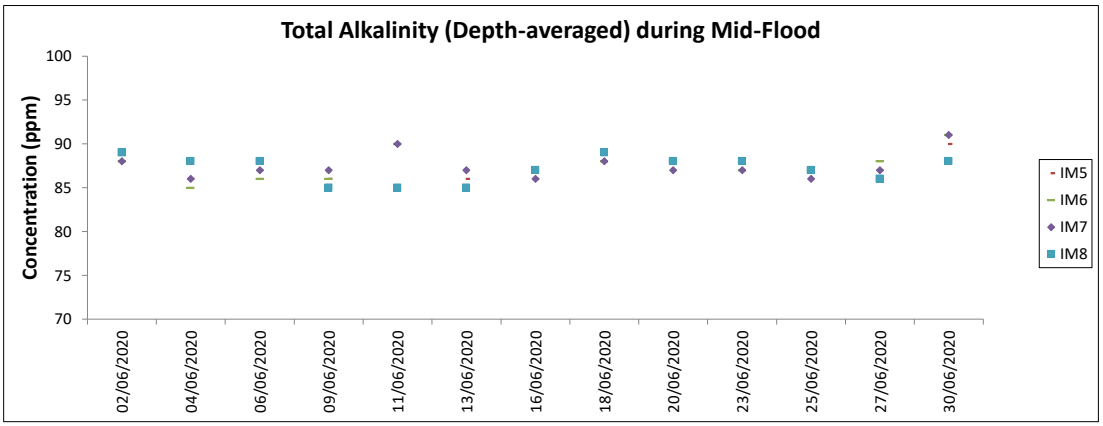


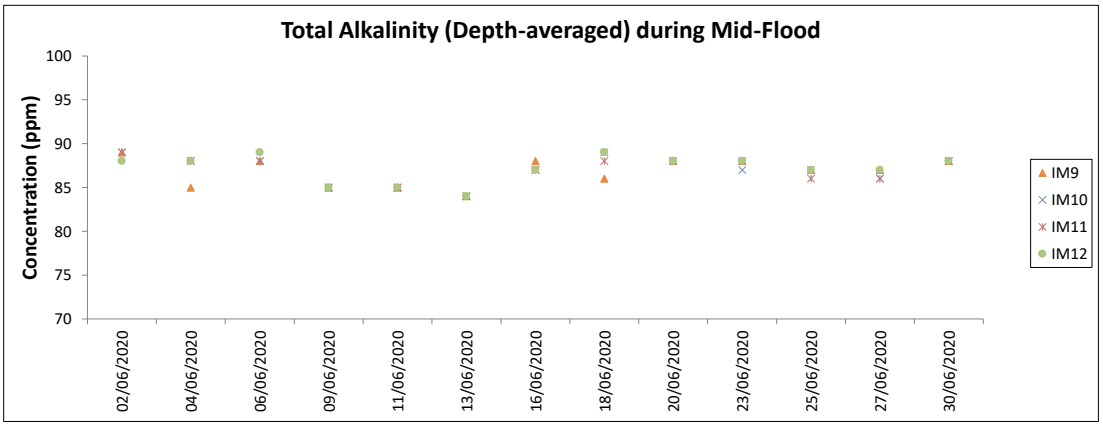


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

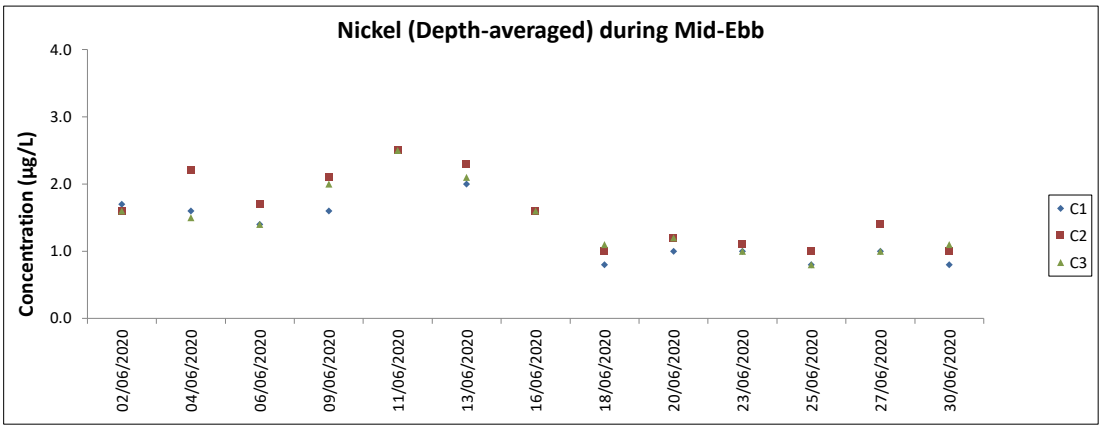


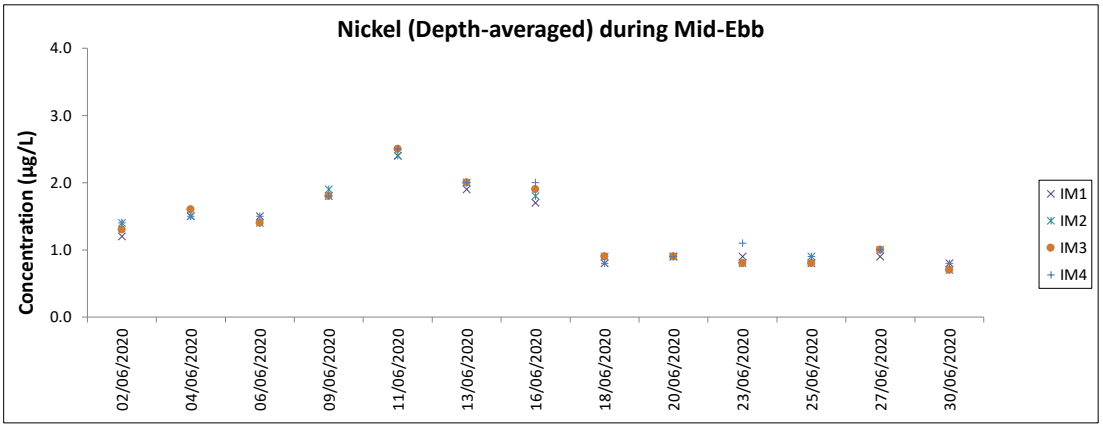


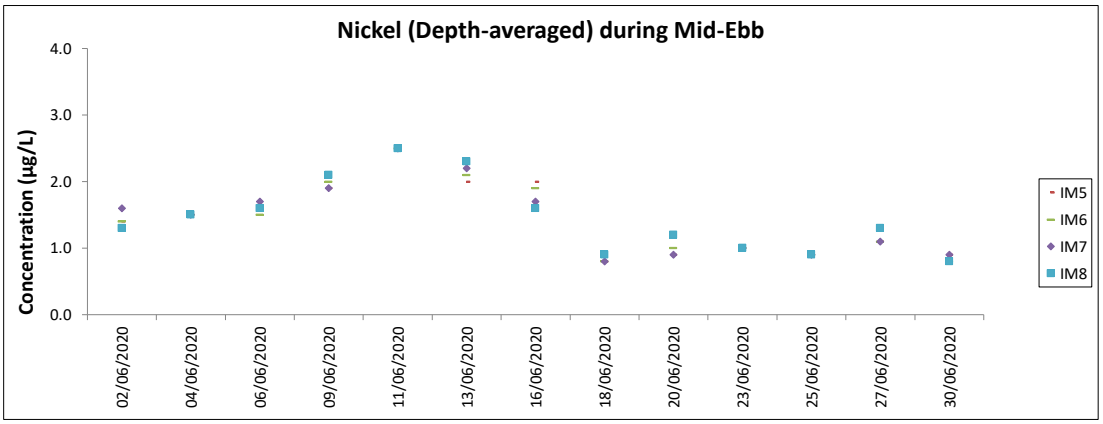


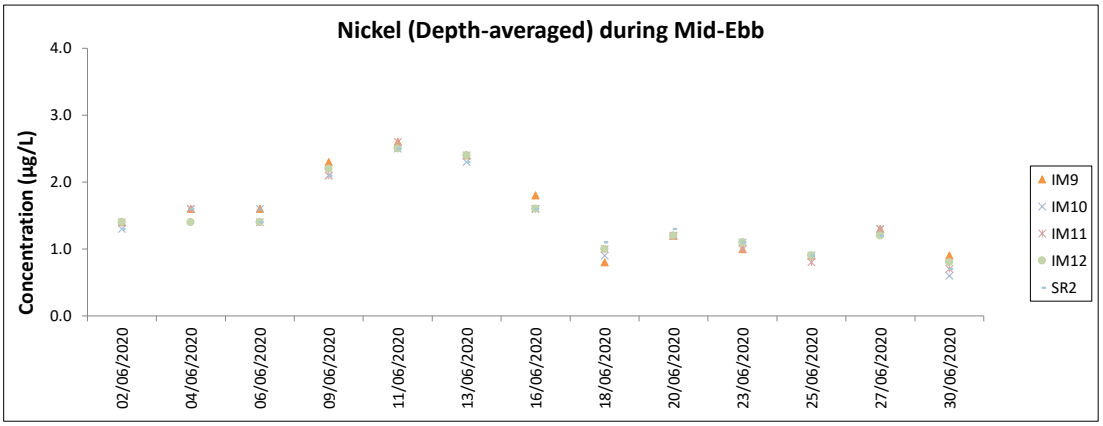


Note: The Action and Limit Level of total alkalinity can be referred to Table 4.2 of the monthly EM&A report.

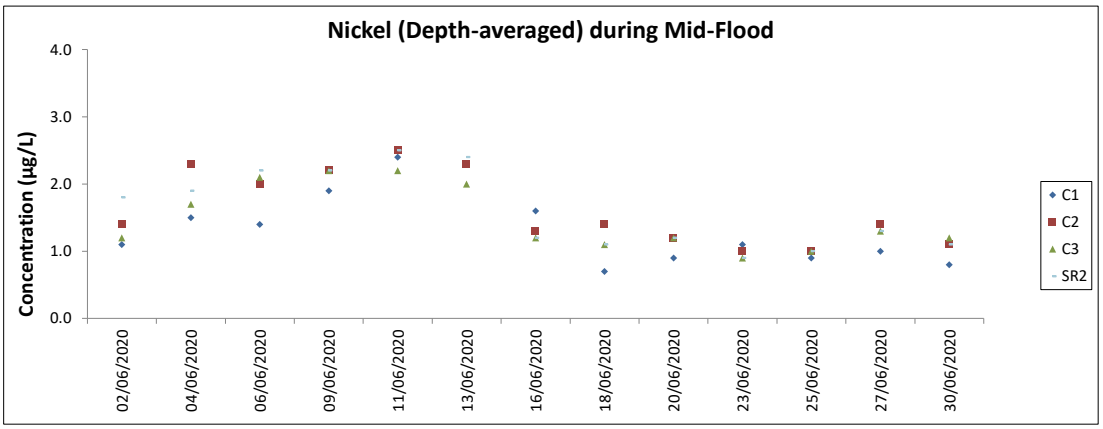


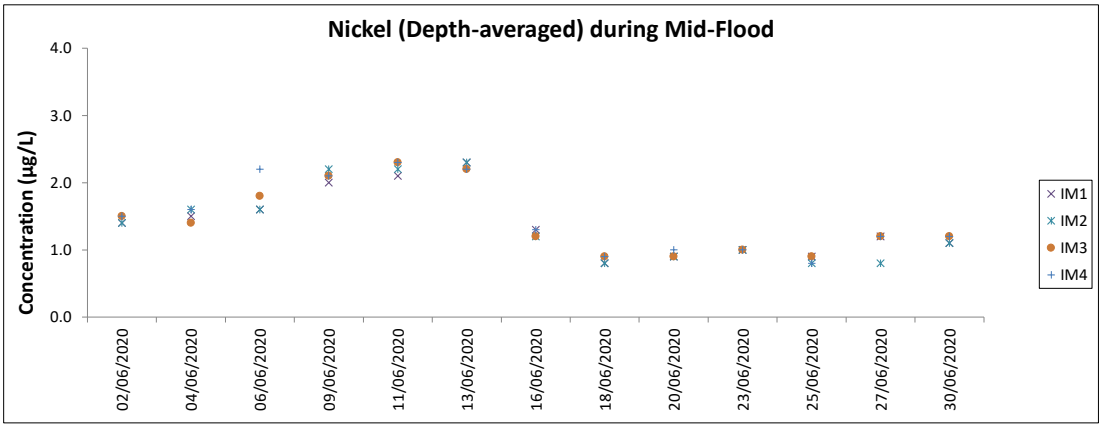


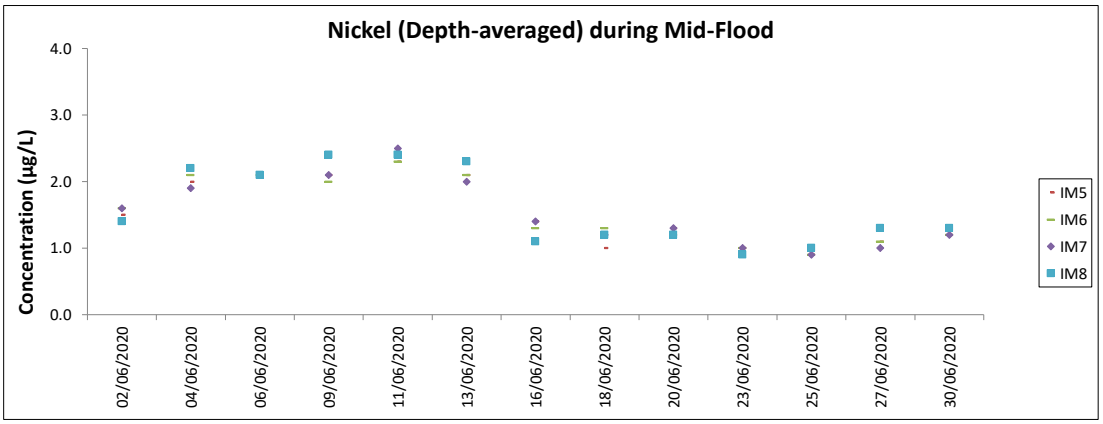


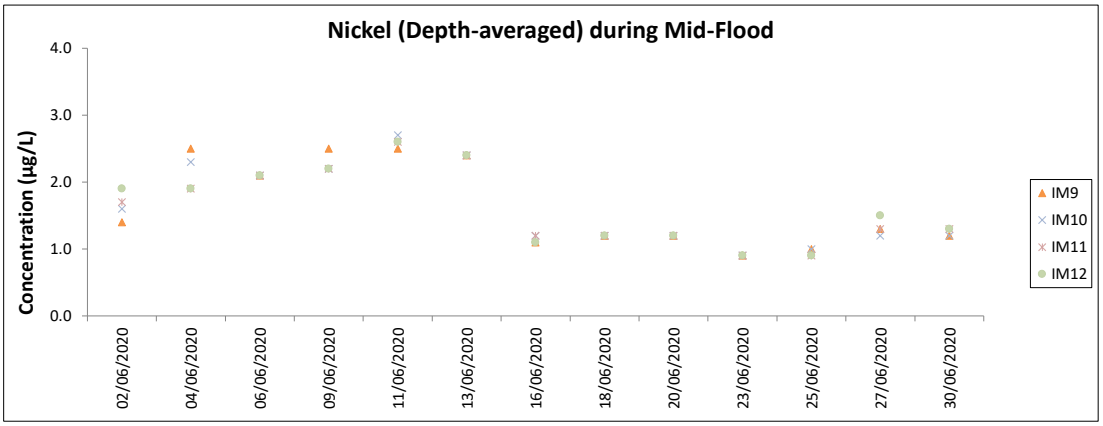


Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/L.









Note: The Action and Limit Level of nickel can be referred to Table 4.2 of the monthly EM&A report.
All chromium results in the reporting period was below the reporting limit 0.2 µg/L.
Major site activities carried out during the reporting period are summarized in Section 1.4 of the monthly EM&A report.
Weather conditions during monitoring are presented in the data tables above.
QA/ QC requirements as stipulated in the EM&A Manual were carried out during measurement.

Chinese White Dolphin Monitoring Results

CWD Small Vessel Line-transect Survey — Survey Effort Data

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
3-Apr-20	NEL	2	1.270	SPRING	32166	3RS ET	P
3-Apr-20	NEL	3	26.900	SPRING	32166	3RS ET	P
3-Apr-20	NEL	4	8.700	SPRING	32166	3RS ET	P
3-Apr-20	NEL	3	9.830	SPRING	32166	3RS ET	S
3-Apr-20	NEL	4	1.000	SPRING	32166	3RS ET	S
7-Apr-20	NEL	1	10.100	SPRING	32166	3RS ET	P
7-Apr-20	NEL	2	27.170	SPRING	32166	3RS ET	P
7-Apr-20	NEL	1	1.000	SPRING	32166	3RS ET	S
7-Apr-20	NEL	2	9.330	SPRING	32166	3RS ET	S
9-Apr-20	AW	2	5.030	SPRING	32166	3RS ET	P
9-Apr-20	WL	2	10.238	SPRING	32166	3RS ET	P
9-Apr-20	WL	3	6.538	SPRING	32166	3RS ET	P
9-Apr-20	WL	4	1.390	SPRING	32166	3RS ET	P
9-Apr-20	WL	2	6.432	SPRING	32166	3RS ET	S
9-Apr-20	WL	3	2.932	SPRING	32166	3RS ET	S
9-Apr-20	WL	4	0.910	SPRING	32166	3RS ET	S
15-Apr-20	AW	2	5.040	SPRING	32166	3RS ET	P
15-Apr-20	WL	2	20.680	SPRING	32166	3RS ET	P
15-Apr-20	WL	2	10.420	SPRING	32166	3RS ET	S
16-Apr-20	SWL	2	52.486	SPRING	32166	3RS ET	P
16-Apr-20	SWL	2	15.854	SPRING	32166	3RS ET	S
17-Apr-20	SWL	2	26.394	SPRING	32166	3RS ET	P
17-Apr-20	SWL	3	27.056	SPRING	32166	3RS ET	P
17-Apr-20	SWL	2	9.230	SPRING	32166	3RS ET	S
17-Apr-20	SWL	3	8.050	SPRING	32166	3RS ET	S
20-Apr-20	NWL	2	41.800	SPRING	32166	3RS ET	P
20-Apr-20	NWL	3	22.200	SPRING	32166	3RS ET	P
20-Apr-20	NWL	2	7.600	SPRING	32166	3RS ET	S
20-Apr-20	NWL	3	4.200	SPRING	32166	3RS ET	S
21-Apr-20	NWL	2	26.840	SPRING	32166	3RS ET	P
21-Apr-20	NWL	3	36.760	SPRING	32166	3RS ET	P
21-Apr-20	NWL	2	4.300	SPRING	32166	3RS ET	S
21-Apr-20	NWL	3	7.600	SPRING	32166	3RS ET	S
4-May-20	NEL	2	32.350	SPRING	32166	3RS ET	P
4-May-20	NEL	3	4.500	SPRING	32166	3RS ET	P
4-May-20	NEL	2	8.050	SPRING	32166	3RS ET	S
4-May-20	NEL	3	1.800	SPRING	32166	3RS ET	S
6-May-20	NWL	2	17.400	SPRING	32166	3RS ET	P
6-May-20	NWL	3	45.000	SPRING	32166	3RS ET	P
6-May-20	NWL	3	13.400	SPRING	32166	3RS ET	S
7-May-20	AW	3	4.890	SPRING	32166	3RS ET	P
7-May-20	WL	3	19.292	SPRING	32166	3RS ET	P
7-May-20	WL	3	11.318	SPRING	32166	3RS ET	S
11-May-20	SWL	1	2.700	SPRING	32166	3RS ET	P
11-May-20	SWL	2	51.714	SPRING	32166	3RS ET	P
11-May-20	SWL	1	1.300	SPRING	32166	3RS ET	S
11-May-20	SWL	2	14.740	SPRING	32166	3RS ET	S

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
12-May-20	SWL	2	42.776	SPRING	32166	3RS ET	P
12-May-20	SWL	3	11.880	SPRING	32166	3RS ET	P
12-May-20	SWL	2	13.052	SPRING	32166	3RS ET	S
12-May-20	SWL	3	2.150	SPRING	32166	3RS ET	S
13-May-20	AW	1	5.060	SPRING	32166	3RS ET	P
13-May-20	WL	1	1.220	SPRING	32166	3RS ET	P
13-May-20	WL	2	9.124	SPRING	32166	3RS ET	P
13-May-20	WL	3	2.062	SPRING	32166	3RS ET	P
13-May-20	WL	4	6.239	SPRING	32166	3RS ET	P
13-May-20	WL	2	4.441	SPRING	32166	3RS ET	S
13-May-20	WL	3	1.748	SPRING	32166	3RS ET	S
13-May-20	WL	4	3.271	SPRING	32166	3RS ET	S
18-May-20	NEL	2	24.600	SPRING	32166	3RS ET	P
18-May-20	NEL	3	12.500	SPRING	32166	3RS ET	P
18-May-20	NEL	2	6.200	SPRING	32166	3RS ET	S
18-May-20	NEL	3	3.900	SPRING	32166	3RS ET	S
20-May-20	NWL	2	2.300	SPRING	32166	3RS ET	P
20-May-20	NWL	3	43.690	SPRING	32166	3RS ET	P
20-May-20	NWL	4	17.310	SPRING	32166	3RS ET	P
20-May-20	NWL	3	9.100	SPRING	32166	3RS ET	S
20-May-20	NWL	4	2.600	SPRING	32166	3RS ET	S
9-Jun-20	NWL	2	2.300	SUMMER	32166	3RS ET	P
9-Jun-20	NWL	3	61.400	SUMMER	32166	3RS ET	P
9-Jun-20	NWL	2	1.500	SUMMER	32166	3RS ET	S
9-Jun-20	NWL	3	10.200	SUMMER	32166	3RS ET	S
11-Jun-20	AW	2	4.760	SUMMER	32166	3RS ET	P
11-Jun-20	WL	2	1.520	SUMMER	32166	3RS ET	P
11-Jun-20	WL	3	16.937	SUMMER	32166	3RS ET	P
11-Jun-20	WL	2	1.060	SUMMER	32166	3RS ET	S
11-Jun-20	WL	3	7.545	SUMMER	32166	3RS ET	S
16-Jun-20	AW	3	4.970	SUMMER	32166	3RS ET	P
16-Jun-20	WL	2	3.459	SUMMER	32166	3RS ET	P
16-Jun-20	WL	3	15.008	SUMMER	32166	3RS ET	P
16-Jun-20	WL	4	1.050	SUMMER	32166	3RS ET	P
16-Jun-20	WL	2	1.080	SUMMER	32166	3RS ET	S
16-Jun-20	WL	3	8.877	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	2	3.700	SUMMER	32166	3RS ET	P
17-Jun-20	NWL	3	52.050	SUMMER	32166	3RS ET	P
17-Jun-20	NWL	4	7.600	SUMMER	32166	3RS ET	P
17-Jun-20	NWL	2	1.200	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	3	8.000	SUMMER	32166	3RS ET	S
17-Jun-20	NWL	4	3.200	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	2	5.388	SUMMER	32166	3RS ET	P
18-Jun-20	SWL	3	34.630	SUMMER	32166	3RS ET	P
18-Jun-20	SWL	4	12.720	SUMMER	32166	3RS ET	P
18-Jun-20	SWL	2	3.312	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	3	11.120	SUMMER	32166	3RS ET	S
18-Jun-20	SWL	4	1.870	SUMMER	32166	3RS ET	S
22-Jun-20	SWL	2	9.376	SUMMER	32166	3RS ET	P

DATE	AREA	BEAU	KM SEARCHED	SEASON	VESSEL	TYPE	P/S
22-Jun-20	SWL	3	31.756	SUMMER	32166	3RS ET	P
22-Jun-20	SWL	4	3.650	SUMMER	32166	3RS ET	P
22-Jun-20	SWL	2	3.471	SUMMER	32166	3RS ET	S
22-Jun-20	SWL	3	10.290	SUMMER	32166	3RS ET	S
23-Jun-20	NEL	2	21.700	SUMMER	32166	3RS ET	P
23-Jun-20	NEL	3	15.280	SUMMER	32166	3RS ET	P
23-Jun-20	NEL	2	6.500	SUMMER	32166	3RS ET	S
23-Jun-20	NEL	3	3.820	SUMMER	32166	3RS ET	S
24-Jun-20	NEL	2	31.670	SUMMER	32166	3RS ET	P
24-Jun-20	NEL	3	5.950	SUMMER	32166	3RS ET	P
24-Jun-20	NEL	2	6.880	SUMMER	32166	3RS ET	S
24-Jun-20	NEL	3	3.100	SUMMER	32166	3RS ET	S

Notes: CWD monitoring survey data of the two preceding survey months are presented for reference only.

CWD Small Vessel Line-transect Survey — Sighting Data

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
9-Apr-20	1	1031	CWD	7	WL	2	264	ON	3RS ET	22.2687	113.8500	SPRING	PURSE SEINER	P
9-Apr-20	2	1053	CWD	2	WL	2	73	ON	3RS ET	22.2636	113.8569	SPRING	NONE	S
9-Apr-20	3	1124	CWD	4	WL	2	58	ON	3RS ET	22.2501	113.8420	SPRING	NONE	P
9-Apr-20	4	1156	CWD	1	WL	3	7	ON	3RS ET	22.2325	113.8378	SPRING	NONE	P
9-Apr-20	5	1226	CWD	1	WL	3	129	ON	3RS ET	22.2146	113.8305	SPRING	NONE	P
9-Apr-20	6	1246	CWD	14	WL	3	148	ON	3RS ET	22.2056	113.8254	SPRING	PAIR TRAWLER	P
15-Apr-20	1	1047	CWD	1	WL	2	240	ON	3RS ET	22.2505	113.8392	SPRING	NONE	P
16-Apr-20	1	1023	FP	1	SWL	2	43	ON	3RS ET	22.2087	113.9356	SPRING	NONE	P
16-Apr-20	2	1032	FP	2	SWL	2	187	ON	3RS ET	22.1955	113.9360	SPRING	NONE	P
16-Apr-20	3	1036	FP	1	SWL	2	341	ON	3RS ET	22.1888	113.9363	SPRING	NONE	P
16-Apr-20	4	1038	FP	2	SWL	2	22	ON	3RS ET	22.1864	113.9363	SPRING	NONE	P
16-Apr-20	5	1042	FP	2	SWL	2	199	ON	3RS ET	22.1832	113.9363	SPRING	NONE	P
16-Apr-20	6	1054	FP	3	SWL	2	257	ON	3RS ET	22.1604	113.9361	SPRING	NONE	P
16-Apr-20	7	1112	FP	3	SWL	2	4	ON	3RS ET	22.1582	113.9274	SPRING	NONE	P
16-Apr-20	8	1116	FP	5	SWL	2	1108	ON	3RS ET	22.1626	113.9276	SPRING	NONE	P
16-Apr-20	9	1121	FP	2	SWL	2	46	ON	3RS ET	22.1687	113.9278	SPRING	NONE	P
16-Apr-20	10	1131	FP	2	SWL	2	444	ON	3RS ET	22.1871	113.9276	SPRING	NONE	P
16-Apr-20	11	1135	FP	1	SWL	2	6	ON	3RS ET	22.1909	113.9275	SPRING	NONE	P
16-Apr-20	12	1209	FP	4	SWL	2	99	ON	3RS ET	22.1597	113.9176	SPRING	NONE	P
16-Apr-20	13	1215	FP	1	SWL	2	46	ON	3RS ET	22.1494	113.9177	SPRING	NONE	P
16-Apr-20	14	1228	FP	2	SWL	2	146	ON	3RS ET	22.1460	113.9083	SPRING	NONE	P
16-Apr-20	15	1233	FP	1	SWL	2	70	ON	3RS ET	22.1511	113.9083	SPRING	NONE	P
16-Apr-20	16	1335	FP	3	SWL	2	18	ON	3RS ET	22.1562	113.8980	SPRING	NONE	P
16-Apr-20	17	1338	FP	4	SWL	2	251	ON	3RS ET	22.1523	113.8974	SPRING	NONE	P
17-Apr-20	1	1304	FP	3	SWL	2	70	ON	3RS ET	22.1701	113.8964	SPRING	NONE	P
17-Apr-20	2	1311	FP	1	SWL	2	747	ON	3RS ET	22.1594	113.8973	SPRING	NONE	P
17-Apr-20	3	1327	FP	1	SWL	3	68	ON	3RS ET	22.1608	113.8872	SPRING	NONE	P
7-May-20	1	1032	CWD	1	WL	3	177	ON	3RS ET	22.2692	113.8499	SPRING	NONE	P
7-May-20	2	1115	CWD	1	WL	3	19	ON	3RS ET	22.2409	113.8395	SPRING	NONE	P
7-May-20	3	1121	CWD	15	WL	3	257	ON	3RS ET	22.2411	113.8362	SPRING	NONE	P
11-May-20	1	1052	FP	1	SWL	2	421	ON	3RS ET	22.1620	113.9362	SPRING	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
11-May-20	2	1055	FP	4	SWL	2	22	ON	3RS ET	22.1606	113.9360	SPRING	NONE	P
11-May-20	3	1058	FP	2	SWL	2	181	ON	3RS ET	22.1554	113.9361	SPRING	NONE	P
11-May-20	4	1513	CWD	13	SWL	2	191	ON	3RS ET	22.1850	113.8500	SPRING	NONE	P
12-May-20	1	1051	FP	4	SWL	2	14	ON	3RS ET	22.1543	113.9363	SPRING	NONE	P
12-May-20	2	1057	FP	3	SWL	2	120	ON	3RS ET	22.1474	113.9330	SPRING	NONE	S
12-May-20	3	1101	FP	2	SWL	2	188	ON	3RS ET	22.1451	113.9301	SPRING	NONE	S
12-May-20	4	1215	FP	2	SWL	2	17	ON	3RS ET	22.1550	113.9057	SPRING	NONE	S
12-May-20	5	1441	CWD	5	SWL	2	170	ON	3RS ET	22.1954	113.8685	SPRING	NONE	P
12-May-20	6	1546	CWD	1	SWL	3	279	ON	3RS ET	22.1946	113.8500	SPRING	NONE	P
13-May-20	1	1056	CWD	6	WL	2	331	ON	3RS ET	22.2447	113.8495	SPRING	NONE	S
13-May-20	2	1127	CWD	1	WL	2	179	ON	3RS ET	22.2416	113.8370	SPRING	NONE	P
13-May-20	3	1140	CWD	16	WL	3	78	ON	3RS ET	22.2414	113.8286	SPRING	PURSE SEINER	P
13-May-20	4	1231	CWD	1	WL	4	60	ON	3RS ET	22.2149	113.8309	SPRING	NONE	P
11-Jun-20	1	1028	CWD	2	WL	3	396	ON	3RS ET	22.2636	113.8574	SUMMER	NONE	S
11-Jun-20	2	1050	CWD	3	WL	3	6	ON	3RS ET	22.2552	113.8359	SUMMER	NONE	S
11-Jun-20	3	1121	CWD	5	WL	3	323	ON	3RS ET	22.2408	113.8315	SUMMER	NONE	P
11-Jun-20	4	1213	CWD	5	WL	3	689	ON	3RS ET	22.2140	113.8257	SUMMER	NONE	P
11-Jun-20	5	1243	CWD	7	WL	3	1028	ON	3RS ET	22.2055	113.8330	SUMMER	NONE	P
11-Jun-20	6	1311	CWD	3	WL	3	86	ON	3RS ET	22.1958	113.8329	SUMMER	NONE	P
11-Jun-20	7	1325	CWD	6	WL	3	70	ON	3RS ET	22.1958	113.8408	SUMMER	NONE	P
16-Jun-20	1	1041	CWD	1	WL	2	75	ON	3RS ET	22.2609	113.8522	SUMMER	NONE	P
16-Jun-20	2	1055	CWD	6	WL	3	124	ON	3RS ET	22.2607	113.8495	SUMMER	NONE	P
16-Jun-20	3	1244	CWD	1	WL	3	112	ON	3RS ET	22.2049	113.8345	SUMMER	NONE	P
16-Jun-20	4	1310	CWD	3	WL	2	65	ON	3RS ET	22.2532	113.8336	SUMMER	NONE	P
16-Jun-20	5	1345	CWD	8	WL	2	203	ON	3RS ET	22.1945	113.8423	SUMMER	NONE	S
18-Jun-20	1	1248	CWD	5	SWL	2	118	ON	3RS ET	22.1970	113.9082	SUMMER	NONE	P
18-Jun-20	2	1321	CWD	6	SWL	3	85	ON	3RS ET	22.1937	113.8972	SUMMER	GILLNETTER	P
18-Jun-20	3	1550	CWD	2	SWL	3	46	ON	3RS ET	22.1852	113.8492	SUMMER	NONE	P
22-Jun-20	1	1144	CWD	4	SWL	2	807	ON	3RS ET	22.1939	113.9179	SUMMER	NONE	P
22-Jun-20	2	1256	CWD	4	SWL	3	178	ON	3RS ET	22.1881	113.9054	SUMMER	NONE	S
22-Jun-20	3	1321	CWD	3	SWL	2	898	ON	3RS ET	22.2123	113.8979	SUMMER	NONE	P
22-Jun-20	4	1344	CWD	4	SWL	2	386	ON	3RS ET	22.1934	113.8979	SUMMER	NONE	P
22-Jun-20	5	1432	CWD	1	SWL	3	520	ON	3RS ET	22.1688	113.8879	SUMMER	NONE	P

DATE	STG #	TIME	CWD/FP	GP SZ	AREA	BEAU	PSD	EFFORT	TYPE	DEC LAT	DEC LON	SEASON	BOAT ASSOC.	P/S
22-Jun-20	6	1453	CWD	5	SWL	3	305	ON	3RS ET	22.1898	113.8883	SUMMER	NONE	P
22-Jun-20	7	1548	CWD	1	SWL	3	225	ON	3RS ET	22.1795	113.8686	SUMMER	NONE	P
22-Jun-20	8	1607	CWD	1	SWL	2	67	ON	3RS ET	22.1904	113.8593	SUMMER	NONE	P
22-Jun-20	9	1614	CWD	2	SWL	2	36	ON	3RS ET	22.1824	113.8596	SUMMER	NONE	P

Abbreviations: STG# = Sighting Number; GP SZ = Group Size; BEAU = Beaufort Sea State; PSD = Perpendicular Distance (in metres); N/A = Not Applicable; DEC LAT = Latitude (WGS84 in Decimal), DEC LON = Longitude (WGS84 in Decimal); BOAT ASSOC. = Fishing Boat Association; P/S = Primary Transect / Secondary Transect

Notes:

CWD monitoring survey data of the two preceding survey months are presented for reference only. No relevant figure or text will be mentioned in this monthly EM&A report.

Sighting data of finless porpoise (FP) are presented for reference only. No relevant figure or text will be mentioned in the monthly EM&A report. All FP sightings are excluded in calculation.

Calculation of the encounter rates STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 409.809 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 24 on-effort sightings and total number of 88 dolphins from on-effort sightings were collected under such condition. Calculation of the encounter rates in June 2020 are shown as below:

Encounter Rate by Number of Dolphin Sightings (STG) in June 2020

$$STG = \frac{24}{409.809}\ x\ 100 = 5.86$$

Encounter Rate by Number of Dolphins (ANI) in June 2020

$$ANI = \frac{88}{409.809}\ x\ 100 = 21.47$$

Calculation of the running quarterly STG and ANI in the whole survey area (NEL, NWL, AW, WL, SWL):

A total of 1277.346 km of survey effort was collected under Beaufort Sea State 3 or below with favourable visibility; total no. of 40 on-effort sightings and total number of 177 dolphins from on-effort sightings were collected under such condition. Calculation of the running quarterly encounter rates are shown as below:

Running Quarterly Encounter Rate by Number of Dolphin Sightings (STG)

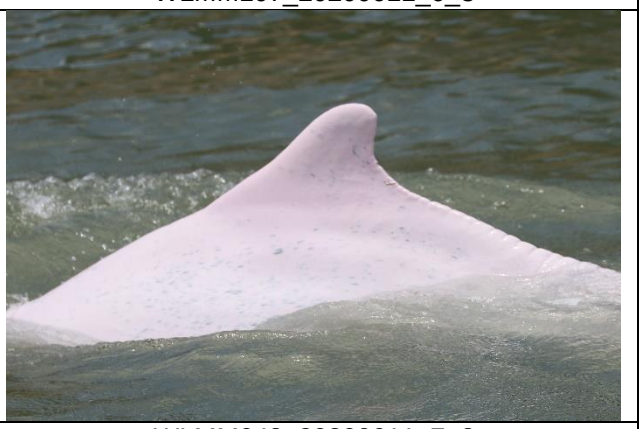
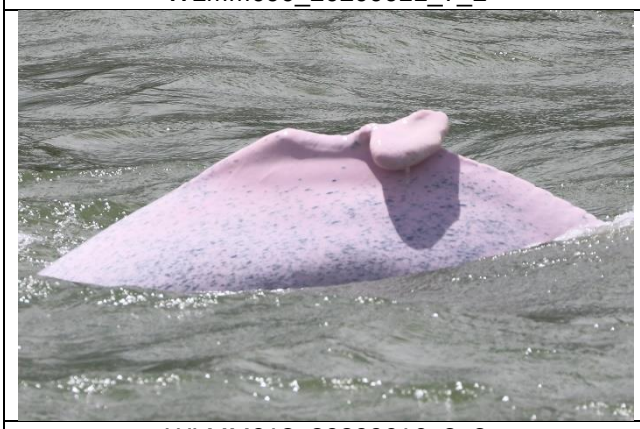
$$STG = \frac{40}{1277.346}\ x\ 100 = 3.13$$

Running Quarterly Encounter Rate by Number of Dolphins (ANI)

$$ANI = \frac{177}{1277.346}\ x\ 100 = 13.86$$

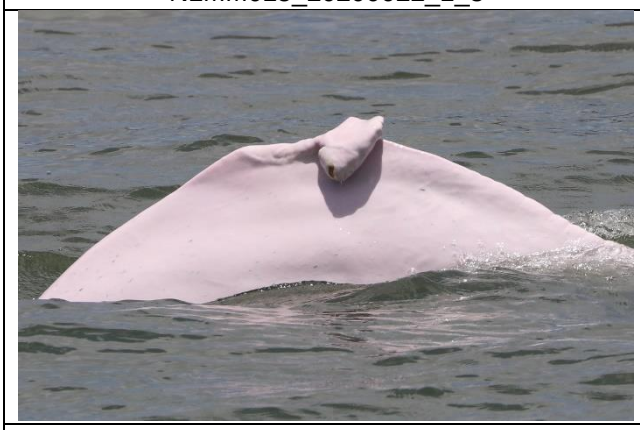
CWD Small Vessel Line-transect Survey **Photo Identification**

	
NLMM011_20200611_1_1	SLMM036_20200611_1_11
	
WLMM043_20200611_4_6	WLMM109_20200611_4_10
	
WLMM142_20200611_4_5	NLMM055_20200611_5_2
	
WLMM107_20200611_5_2	WLMM141_20200611_5_1

	
WLMM149_20200611_5_5	WLMM107_20200611_6_3
	
WLMM003_20200611_7_1	WLMM043_20200611_7_2
	
WLMM090_20200611_7_2	NLMM043_20200616_1_1
	
WLMM013_20200616_2_2	WLMM030_20200616_2_1

	
WLMM062_20200616_2_2	WLMM153_20200616_2_6
	
WLMM015_20200616_4_3	WLMM081_20200616_4_1
	
WLMM082_20200616_4_1	SLMM025_20200616_5_4
	
SLMM028_20200616_5_2	WLMM004_20200616_5_6

	
WLMM090_20200616_5_5	SLMM014_20200618_1_5
	
SLMM025_20200618_1_7	SLMM028_20200618_1_2
	
SLMM014_20200618_2_1	SLMM049_20200618_2_2
	
WLMM114_20200618_2_3	WLMM131_20200618_2_1

	
NLMM015_20200622_1_3	NLMM063_20200622_1_2
	
NLMM015_20200622_2_4	NLMM063_20200622_2_2
	
WLMM011_20200622_2_2	SLMM070_20200622_3_2
	
WLMM018_20200622_4_4	WLMM073_20200622_4_2

	
WLMM114_20200622_6_1	

CWD Land-based Theodolite Tracking Survey

CWD Groups by Survey Date

Date	Station	Start Time	End Time	Duration	Beaufort Range	Visibility	No. of Focal Follow Dolphin Groups Tracked	Dolphin Group Size Range
4/Jun/20	Lung Kwu Chau	9:00	15:00	6:00	2-3	1	0	-
10/Jun/20	Sha Chau	10:45	16:45	6:00	3	1	0	-

Visibility: 1=Excellent, 2=Good, 3=Fair, 4=Poor

Appendix E. Calibration Certificates

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C203416
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC20-1239) Date of Receipt / 收件日期 : 9 June 2020

Description / 儀器名稱 : Sound Level Meter
Manufacturer / 製造商 : Rion
Model No. / 型號 : NL-52
Serial No. / 編號 : 01287679
Supplied By / 委託者 : Mott MacDonald Hong Kong Limited
3/F., International Trade Tower,
348 Kwun Tong Road, Kowloon, Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 21 June 2020

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed manufacturer's specification.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- The Bruel & Kjaer Calibration Laboratory, Denmark
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : H T Wong
Assistant Engineer

Certified By 核證 : K C Lee
Engineer

Date of Issue 簽發日期 : 22 June 2020

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C203416
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

2. Self-calibration was performed before the test.

3. The results presented are the mean of 3 measurements at each calibration point.

4. Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C200258
CL281	Multifunction Acoustic Calibrator	CDK1806821

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L_A	A	Fast	94.00	1	93.9	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 130	L_A	A	Fast	94.00	1	93.9 (Ref.)
				104.00		103.9
				114.00		113.9

IEC 61672 Class 1 Spec. : ± 0.6 dB per 10 dB step and ± 1.1 dB for overall different.

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L_A	A	Fast	94.00	1	93.9	Ref.
			Slow			93.9	± 0.3

Certificate of Calibration
校正證書

Certificate No. : C203416
證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L_A	A	Fast	94.00	63 Hz	67.6	-26.2 ± 1.5
					125 Hz	77.7	-16.1 ± 1.5
					250 Hz	85.2	-8.6 ± 1.4
					500 Hz	90.6	-3.2 ± 1.4
					1 kHz	93.9	Ref.
					2 kHz	95.1	+1.2 ± 1.6
					4 kHz	94.9	+1.0 ± 1.6
					8 kHz	92.8	-1.1 (+2.1 ; -3.1)
					12.5 kHz	89.5	-4.3 (+3.0 ; -6.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L_C	C	Fast	94.00	63 Hz	93.0	-0.8 ± 1.5
					125 Hz	93.7	-0.2 ± 1.5
					250 Hz	93.9	0.0 ± 1.4
					500 Hz	93.9	0.0 ± 1.4
					1 kHz	93.9	Ref.
					2 kHz	93.7	-0.2 ± 1.6
					4 kHz	93.1	-0.8 ± 1.6
					8 kHz	90.9	-3.0 (+2.1 ; -3.1)
					12.5 kHz	87.5	-6.2 (+3.0 ; -6.0)

輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C203416
證書編號

Remarks : - UUT Microphone Model No. : UC-59 & S/N : 17085

- Mfr's Spec. : IEC 61672 Class 1

- Uncertainties of Applied Value :

94 dB	: 63 Hz - 125 Hz	: ± 0.35 dB
	250 Hz - 500 Hz	: ± 0.30 dB
	1 kHz	: ± 0.20 dB
	2 kHz - 4 kHz	: ± 0.35 dB
	8 kHz	: ± 0.45 dB
	12.5 kHz	: ± 0.70 dB
104 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)
114 dB	: 1 kHz	: ± 0.10 dB (Ref. 94 dB)

- The uncertainties are for a confidence probability of not less than 95 %.

Note :
Only the original copy or the laboratory's certified true copy is valid.

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

專業化驗有限公司
QUALITY PRO TEST-CONSULT LIMITED
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ060054
Date of Issue : 10 June 2020

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	16H104234
Date of Received	:	Jun 10, 2020
Date of Calibration	:	Jun 10, 2020
Date of Next Calibration[a]	:	Sep 09, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H^+ B
Dissolved Oxygen	APHA 21e 4500-O G
Conductivity at 25°C	APHA 21e 2510 B
Salinity	APHA 21e 2520 B
Turbidity	APHA 21e 2130 B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	3.98	-0.02	Satisfactory
7.42	7.46	0.04	Satisfactory
10.01	9.96	-0.05	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.1	0.1	Satisfactory
35.0	35.5	0.5	Satisfactory
50.0	50.2	0.2	Satisfactory

Tolerance limit of temperature should be less than ±2.0 (°C)

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

[a] *The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.*
[b] *The results relate only to the calibrated equipment as received*
[c] *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*
[d] *"Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.*
[e] *The "Tolerance Limit" mentioned is referenced to YSI product specifications.*

LEE Chun-ning, Desmond
Senior Chemist

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QUALITY PRO TEST-CONSULT LIMITED
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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ060054
Date of Issue : 10 June 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.40	0.40	0.00	Satisfactory
2.66	2.78	0.12	Satisfactory
5.80	5.80	0.00	Satisfactory
7.78	7.91	0.13	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	148.2	0.88	Satisfactory
0.01	1412	1409	-0.21	Satisfactory
0.1	12890	13068	1.38	Satisfactory
0.5	58670	57992	-1.16	Satisfactory
1.0	111900	112936	0.93	Satisfactory

Tolerance limit of conductivity should be less than ±10.0 (%)

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.94	-0.60	Satisfactory
20	19.92	-0.40	Satisfactory
30	30.21	0.70	Satisfactory

Tolerance limit of salinity should be less than ±10.0 (%)

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0	--	Satisfactory
10	9.90	-1.00	Satisfactory
20	19.92	-0.40	Satisfactory
100	106.12	6.12	Satisfactory
800	796.40	-0.45	Satisfactory

Tolerance limit of turbidity should be less than ±10.0 (%)

~ END OF REPORT ~

Remark(s): -

(f) "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

(g) The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ060055
Date of Issue : 10 June 2020

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin
New Territories, Hong Kong
Attn: Mr. Thomas WONG

PART B – DESCRIPTION

Name of Equipment	:	YSI ProDSS (Multi-Parameters)
Manufacturer	:	YSI (a xylem brand)
Serial Number	:	17E100747
Date of Received	:	Jun 10, 2020
Date of Calibration	:	Jun 10, 2020
Date of Next Calibration[a]	:	Sep 09, 2020

PART C – REFERENCE METHODS/ DOCUMENTS FOR THE CALIBRATION

Parameter	Reference Method
pH at 25°C	APHA 21e 4500-H^+ B
Dissolved Oxygen	APHA 21e 4500-O G
Conductivity at 25°C	APHA 21e 2510 B
Salinity	APHA 21e 2520 B
Turbidity	APHA 21e 2130 B
Temperature	Section 6 of international Accreditation New Zealand Technical Guide no. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

PART D – CALIBRATION RESULTS[b,c]

(1) pH at 25°C

Target (pH unit)	Displayed Reading[d] (pH Unit)	Tolerance[e](pH Unit)	Results
4.00	4.06	0.06	Satisfactory
7.42	7.48	0.06	Satisfactory
10.01	10.05	0.04	Satisfactory

Tolerance of pH should be less than ±0.20 (pH unit)

(2) Temperature

Reading of Ref. thermometer (°C)	Displayed Reading (°C)	Tolerance (°C)	Results
10.0	10.1	0.1	Satisfactory
35.0	35.5	0.5	Satisfactory
50.0	50.1	0.1	Satisfactory

Tolerance limit of temperature should be less than ±2.0 (°C)

~ CONTINUED ON NEXT PAGE ~

Remark(s): -

[a] The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted form relevant international standards.
[b] The results relate only to the calibrated equipment as received
[c] The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.
[d] "Displayed Reading" denotes the figure shown on item under calibration/ checking regardless of equipment precision or significant figures.
[e] The "Tolerance Limit" mentioned is referenced to YSI product specifications.

LEE Chun-ning, Desmond
Senior Chemist

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REPORT OF EQUIPMENT PERFORMANCE CHECK/ CALIBRATION

Report No. : AJ060055
Date of Issue : 10 June 2020

PART D – CALIBRATION RESULTS (Cont'd)

(3) Dissolved Oxygen

Expected Reading (mg/L)	Displayed Reading (mg/L)	Tolerance (mg/L)	Results
0.40	0.42	0.02	Satisfactory
2.66	2.82	0.16	Satisfactory
5.80	5.91	0.11	Satisfactory
7.78	7.88	0.10	Satisfactory

Tolerance limit of dissolved oxygen should be less than ±0.50 (mg/L)

(4) Conductivity at 25°C

Conc. of KCl (M)	Expected Reading (µS/cm)	Displayed Reading (µS/cm)	Tolerance (%)	Results
0.001	146.9	147.3	0.27	Satisfactory
0.01	1412	1426	0.99	Satisfactory
0.1	12890	13090	1.55	Satisfactory
0.5	58670	57828	-1.44	Satisfactory
1.0	111900	112834	0.83	Satisfactory

Tolerance limit of conductivity should be less than ±10.0 (%)

(5) Salinity

Expected Reading (g/L)	Displayed Reading (g/L)	Tolerance (%)	Results
10	9.96	-0.40	Satisfactory
20	19.89	-0.55	Satisfactory
30	30.12	0.40	Satisfactory

Tolerance limit of salinity should be less than ±10.0 (%)

(6) Turbidity

Expected Reading (NTU)	Displayed Reading[f] (NTU)	Tolerance[g] (%)	Results
0	0	--	Satisfactory
10	9.97	-0.30	Satisfactory
20	19.88	-0.60	Satisfactory
100	103.42	3.42	Satisfactory
800	798.34	-0.21	Satisfactory

Tolerance limit of turbidity should be less than ±10.0 (%)

~ END OF REPORT ~

Remark(s): -

[f] "Displayed Reading" presents the figures shown on item under calibration/ checking regardless of equipment precision or significant figures.

[g] The "Tolerance Limit" mentioned is the acceptance criteria applicable for similar equipment used by Quality Pro Test-Consult Ltd. or quoted form relevant international standards.

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CALIBRATION REPORT

Test Report No. : AJ060018
Date of Issue : 05 June 2020

PART A – CUSTOMER INFORMATION

Enovative Environmental Service Ltd.
Flat 2207, Yu Fun House,
Yu Chui Court, Shatin,
New Territories, Hong Kong
Attn: Mr. Thomas Wong

PART B – SAMPLE INFORMATION

Description of Samples	:	Titrette® bottle-top burette, 50mL
Brand Name	:	BRAND
Model Number	:	1224B90
Serial Number	:	10N60623
Date of Received	:	Jun 01, 2020
Date of Calibration	:	Jun 01, 2020
Date of Next Calibration[a]	:	Aug 31, 2020

PART C – CALIBRATION REQUESTED

Parameter[b]	Reference Method
Accuracy Test	In-house Method (Gravimetric Method)

~ Continued On Next Page ~

Remark(s): -
[a] The "Date of Next Calibration" is recommended according to best practice principals as practiced by QPT or quoted from relevant international standards.
[b] All chemical and microbiological tests were performed at unit 10-5/F and unit 10-14/F respectively of the company address stated above.

LEE Chun-ning Desmond
Senior Chemist

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CALIBRATION REPORT

Test Report No. : AJ060018
Date of Issue : 05 June 2020

PART D – RESULT[c],[d]

Water temperature: 25.5°C
Environmental conditions of the calibration:
Relative humidity: 65%
Z-Factor: 1.0042
Nominal volume: 3.0ml

Trial	Range: (1-4)	Range: (16-19)	Range: (23-26)	Range: (34-37)	Range: (42-45)
1	2.9598	2.9542	2.9605	2.9587	2.9565
2	2.9519	2.9493	2.9625	2.952	2.952
3	2.9502	2.9561	2.9638	2.9786	2.9569
4	2.9599	2.9598	2.9575	2.967	2.949
5	2.9614	2.9593	2.9596	2.9567	2.9573
6	2.9682	2.9597	2.9543	2.9553	2.9415
7	2.9684	2.9578	2.9632	2.9569	2.9731
8	2.9597	2.9777	2.9525	2.9702	2.9778
9	2.9611	2.9605	2.9583	2.9537	2.9596
10	2.9576	2.9553	2.9457	2.9525	2.9645
Average (g)	2.9598	2.9590	2.9578	2.9602	2.9588
Standard deviation	0.0059	0.0074	0.0056	0.0088	0.0108
Converted volume (mL)	2.9723	2.9714	2.9702	2.9726	2.9712
Error (%)	-0.9250	-0.9534	-0.9929	-0.9136	-0.9584
RSD (%)	0.1969	0.2493	0.1894	0.2973	0.3638

Acceptance Criteria [e]

Accuracy (%Error)	< ±1%	< ±1%	< ±1%	< ±1%	< ±1%
Precision (%RSD)	< 1%	< 1%	< 1%	< 1%	< 1%

~ END OF REPORT ~

Remark(s): -

[c] *The results relate only to the tested sample as received*

[d] *The performance of the equipment stated in this report is checked with independent reference material and results compared against a calibrated secondary source.*

[e] *The "acceptance criteria" is applicable for similar equipment used by QPT or quoted from relevant international standards.*

Appendix F. Status of Environmental Permits and Licences

	Description	Permit/ Reference No.	Status
EIAO	Environmental Permit	EP-489/2014	Approved on 7 Nov 2014

Contract No.	Description	Location	Permit/ Reference No.	Status
3205	Notification of Construction Work under APCO	Works area of 3205	453653	Receipt acknowledged by EPD on 25 Feb 2020
	Registration as Chemical Waste Producer	Works Area of 3205	WPN 5213-951-B2502-01	Registration was updated on 25 Sep 2017
		Works Area of 3205	WPN 5111-421-B2509-01	Registration was updated on 25 Sep 2017
	Construction Noise Permit (General Works)	Works Area of 3205	GW-RS0143-20	Superseded by GW-RS0436-20
		Works Area of 3205	GW-RS0436-20	Valid from 30 Jun 2020 to 29 Dec 2020
	Discharge License under WPCO	Works area of 3205	WT00028370-2017	Valid from 21 Jun 2017 to 30 Jun 2022
	Bill Account for disposal	Works area of 3205	A/C 7026295	Approval granted from EPD on 9 Nov 2016
3206	Notification of Construction Work under APCO	Works area of 3206	409237	Receipt acknowledged by EPD on 25 Oct 2016
		Works area of 3206 (Area 11)	447899	Receipt acknowledged by EPD on 8 Aug 2019
	Registration as Chemical Waste Producer	Site office of 3206	WPN 5213-951-Z4035-01	Completion of Registration on 18 Nov 2016
		Works area of 3206	WPN 5213-951-Z4035-02	Completion of Registration on 18 Nov 2016
		Works Area of 3206 (Area 11)	WPN 5213-951-Z4035-04	Completion of Registration on 4 Sep 2019
	Construction Noise Permit (General Works)	Works Area of 3206	GW-RS0331-20	Superseded by GW-RS0423-20
			GW-RS0423-20	Valid from 30 Jun 2020 to 15 Dec 2020
		Works Area of 3206 (Area 11)	GW-RS1170-19	Superseded by GW-RS0414-20
			GW-RS0414-20	Valid from 25 Jun 2020 to 24 Dec 2020
		Works Area of 3206	GW-RS0156-20	Valid from 24 Mar 2020 to 19 Jul 2020
	Bill Account for disposal	Works area of 3206	A/C 7026398	Approval granted from EPD on 16 Nov 2016
3301	Notification of Construction Work under APCO	Works area of 3301	415821	Receipt acknowledged by EPD on 19 Apr 2017

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3301	WPN 5213-951-F2718-02	Completion of Registration on 9 Jun 2017
	Discharge License under WPCO	Works area of 3301	WT00029286-2017	Valid from 20 Sep 2017 to 30 Sep 2022
	Bill Account for disposal	Works area of 3301	A/C 7027728	Approval granted from EPD on 8 May 2017
	Construction Noise Permit (General Works)	Works area of 3301 (Cable ducting works)	GW-RS0129-20	Valid from 4 Mar 2020 to 13 Sep 2020
		Works area of 3301	GW-RS0212-20	Valid until from 12 Apr 2020 to 11 Oct 2020
3302	Notification of Construction Work under APCO	Works area of 3302	440222	Receipt acknowledged by EPD on 10 Dec 2018
		Staging area of 3302	2018CES1	Receipt acknowledged by EPD on 21 Dec 2018
			454882	Receipt acknowledged by EPD on 2 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3302	5296-951-C4331-01	Completion of Registration on 4 Jan 2019
	Discharge License under WPCO	Works area of 3302	WT00034539-2019	Valid from 11 Mar 2020 to 31 Mar 2025
		Staging area of 3302	WT00034541-2019	Valid from 14 Oct 2019 to 31 Oct 2024
	Bill Account for disposal	Works area of 3302	A/C 7032881	Approval granted from EPD on 8 Jan 2019
	Construction Noise Permit (General Works)	Works area of 3302	GW-RS1162-19	Valid from 7 Jan 2020 to 6 Jul 2020
3303	Notification of Construction Work under APCO	Works area of 3303	445611	Receipt acknowledged by EPD on 27 May 2019
	Registration as Chemical Waste Producer	Works area of 3303	5213-951-S4174-01	Completion of Registration on 17 Jun 2019
	Discharge License under WPCO	Works area of 3303	WT00035689-2020	Valid from 11 May 2020 to 31 May 2025
	Bill Account for disposal	Works area of 3303	A/C 7034272	Approval granted from EPD on 10 Jun 2019
	Construction Noise Permit (General Works)	Works area of 3303 (Existing airport)	GW-RS0335-20	Valid from 27 May 2020 to 15 Nov 2020
		Works area of 3303 (Reclamation area)	GW-RS0154-20	Valid from 19 Mar 2020 to 17 Sep 2020
3307	Notification of Construction Work under APCO	Works area of 3307	454964	Receipt acknowledged by EPD on 6 Apr 2020
	Registration as Chemical Waste Producer	Works area of 3307	5211-951-P3379-01	Completion of Registration on 8 Jun 2020
	Bill Account for disposal	Works area of 3307	A/C 7037129	Approval granted from EPD on 5 May 2020
3402		Works area of 3402	440808	Receipt acknowledged by EPD on 31 Dec 2018

Contract No.	Description	Location	Permit/ Reference No.	Status
	Notification of Construction Work under APCO	Stockpiling area of 3402	441960	Receipt acknowledged by EPD on 8 Feb 2019
	Registration as Chemical Waste Producer	Works area of 3402	WPN 5213-951-W1172-05	Registration was updated on 25 Feb 2019
	Discharge License under WPCO	Works area of 3402	WT00033685-2019	Valid from 20 Jun 2019 to 30 Jun 2024
	Bill Account for disposal	Works area of 3402	A/C 7032577	Approval granted from EPD on 27 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3402	GW-RS0070-20	Valid from 3 Feb 2020 to 1 Aug 2020
3403	Notification of Construction Work under APCO	Works area of 3403	450860	Receipt acknowledged by EPD on 11 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3403	WPN 5213-951-S4218-01	Completion of Registration on 9 Jan 2020
	Discharge License under WPCO	Works area of 3403	WT00035841-2020	Valid from 5 Jun 2020 to 30 Jun 2025
	Bill Account for disposal	Works area of 3403	A/C 7035267	Approval granted from EPD on 30 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3403	GW-RS0334-20	Valid from 29 May 2020 to 28 Nov 2020
3405	Notification of Construction Work under APCO	Works area of 3405	453447	Receipt acknowledged by EPD on 18 Feb 2020
	Registration as Chemical Waste Producer	Works area of 3405	WPN 5218-951-C4431-01	Completion of Registration on 12 Mar 2020
	Bill Account for disposal	Works area of 3405	A/C 7036796	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3405	GW-RS0275-20	Superseded by GW-RS0389-20
			GW-RS0389-20	Valid from 15 Jun 2020 to 14 Dec 2020 Superseded by GW-RS429-20
			GW-RS0429-20	Valid from 30 Jun 2020 to 29 Dec 2020
3503	Notification of Construction Work under APCO	Works area of 3503	435180	Receipt acknowledged by EPD on 29 Jun 2018
		Stockpiling area of 3503	454450	Receipt acknowledged by EPD on 17 Mar 2020
		Stockpiling area of 3503	449570	Receipt acknowledged by EPD on 30 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3503	WPN 5113-951-L2845-02	Completion of Registration on 8 Jan 2018
	Discharge License under WPCO	Works area of 3503	WT00031258-2018	Valid from 7 Jun 2018 to 30 Jun 2023
	Bill Account for disposal	Works area of 3503	A/C 7029665	Approval granted from EPD on 27 Dec 2017
	Construction Noise Permit (General Works)	Works area of 3503	GW-RS0351-20	Valid from 24 May 2020 to 31 Oct 2020
		Works area of 3503 (Special Case)	GW-RS0261-20	Valid from 26 Apr 2020 to 1 Jul 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
		Stockpiling area of 3503	GW-RS1180-19	Valid from 4 Jan 2020 to 30 Jun 2020
3601	Notification of Construction Work under APCO	Works area of 3601	451765	Receipt acknowledged by EPD on 10 Dec 2019
	Registration as Chemical Waste Producer	Works area of 3601	WPN 7119-951-C4421-01	Completion of Registration on 9 Jan 2020
	Bill Account for disposal	Works area of 3601	A/C 702991	Approval granted from EPD on 1 Feb 2018
3602	Notification of Construction Work under APCO	Works area of 3602	421278	Receipt acknowledged by EPD on 18 Sep 2017
	Registration as Chemical Waste Producer	Works area of 3602	WPN 5296-951-N2673-01	Completion of Registration on 9 Oct 2017
		Site office of 3602	WPN 5296-951-N2673-02	Completion of Registration on 11 Dec 2017
	Bill Account for disposal	Works area of 3602	A/C 7028942	Approval granted from EPD on 6 Oct 2017
	Construction Noise Permit (General Works)	Works area of 3602	GW-RS0133-20	Valid from 1 Apr 2020 to 30 Sep 2020
3603	Notification of Construction Work under APCO	Site office of 3603	433604	Receipt acknowledged by EPD on 16 May 2018
	Registration as Chemical Waste Producer	Works area of 3603	WPN 5296-951-S4069-01	Completion of Registration on 22 Jan 2018
	Bill Account for disposal	Works area of 3603	A/C 7030002	Approval granted from EPD on 1 Feb 2018
	Construction Noise Permit (General Works)	Works area of 3603	GW-RS0165-20	Valid from 8 Apr 2020 to 7 Oct 2020
3721	Notification of Construction Work under APCO	Works area of 3721	448657	Receipt acknowledged by EPD on 02 Sep 2019
	Registration as Chemical Waste Producer	Works area of 3721	WPN 5218-951-C4412-01	Completion of Registration on 9 Dec 2019
	Bill Account for disposal	Works area of 3721	A/C 705234	Approval granted from EPD on 25 Sep 2019
	Construction Noise Permit (General Works)	Works area of 3721	GW-RS0327-20	Superseded by GW-RS0419-20
			GW-RS0419-20	Valid from 30 Jun 2020 to 29 Dec 2020
3722	Notification of Construction Work under APCO	Works area of 3722A	453195	Receipt acknowledged by EPD on 11 Feb 2020
		Works area of 3722B	453671	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722C	453673	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722D	453675	Receipt acknowledged by EPD on 25 Feb 2020
		Works area of 3722A	WPN 5218-951-T3863-01	Completion of Registration on 18 Mar 2020

Contract No.	Description	Location	Permit/ Reference No.	Status
	Registration as Chemical Waste Producer	Works area of 3722B	WPN 5218-951-T3864-01	Completion of Registration on 18 Mar 2020
		Works area of 3722C	WPN 5218-951-T3862-01	Completion of Registration on 18 Mar 2020
		Works area of 3722D	WPN 5218-951-T3865-01	Completion of Registration on 18 Mar 2020
	Bill Account for disposal	Works area of 3722A	A/C 7036752	Approval granted from EPD on 11 Mar 2020
		Works area of 3722B	A/C 7036966	Approval granted from EPD on 6 Apr 2020
		Works area of 3722C	A/C 7036967	Approval granted from EPD on 6 Apr 2020
		Works area of 3722D	A/C 7036795	Approval granted from EPD on 20 Mar 2020
	Construction Noise Permit (General Works)	Works area of 3722A, 3722B, 3722C and 3722D	GW-RS0155-20	Superseded by GW-RS0304-20
			GW-RS0304-20	Valid from 9 May 2020 to 7 Nov 2020
3801	Notification of Construction Work under APCO	Works area of 3801	418345	Receipt acknowledged by EPD on 26 Jun 2017
			430372	Receipt acknowledged by EPD on 2 Feb 2018
			435652	Receipt acknowledged by EPD on 16 Jul 2018
			451991	Receipt acknowledged by EPD on 18 Dec 2019
		Stockpiling area of 3801	450940	Receipt acknowledged by EPD on 13 Nov 2019
	Registration as Chemical Waste Producer	Works area of 3801	WPN 5296-951-C1169-53	Completion of Registration on 14 Aug 2018
	Discharge License under WPCO	Works and stockpiling area of 3801	WT00029535-2017	Valid from 24 Nov 2017 to 30 Nov 2022
	Bill Account for disposal	Works area of 3801	A/C 7028254	Approval granted from EPD on 3 Jul 2017
	Construction Noise Permit (General Works)	Works and stockpiling area of 3801	GW-RS1212-19	Valid from 9 Jan 2020 to 8 Jul 2020
		Works area of 3801	GW-RS0152-20	Valid from 27 Mar 2020 to 26 Jun 2020
			GW-RS0113-20	Superseded by GW-RS0366-20
			GW-RS0366-20	Valid from 2 Jun 2020 to 1 Aug 2020
3802	Bill Account for disposal	Works area of 3802	A/C 737575	Approval granted from EPD on 15 Jun 2020
3901A	Notification of Construction Work under APCO	Works area of 3901A	456240	Receipt acknowledged by EPD on 18 May 2020
		Works area of 3901A (Special case)	421723	Receipt acknowledged by EPD on 10 Jun 2020
	Construction Noise Permit (General Works)	Works area of 3901A	GW-RS0298-20	Valid from 25 May 2020 to 24 Nov 2020
3901B	Notification of Construction Work under APCO	Works area of 3901B	452168	Receipt acknowledged by EPD on 23 Dec 2019

Contract No.	Description	Location	Permit/ Reference No.	Status
	Specified Process license under APCO	Works area of 3901B	443181	Receipt acknowledged by EPD on 15 Mar 2019
	Registration as Chemical Waste Producer	Works area of 3901B	WPN 5218-951-G2880-01	Completion of Registration on 17 Jan 2020
	Bill Account for disposal	Works area of 3901B	A/C 7032417	Approval granted from EPD on 13 Nov 2018
	Construction Noise Permit (General Works)	Works area of 3901B	GW-RS0106-20	Valid from 2 Mar 2020 to 19 Aug 2020

Appendix G. Cumulative Statistics on Exceedances, Environmental Complaints, Notification of Summons and Status of Prosecutions

Statistics for Exceedances for 1-hour TSP, Noise, Water, Waste, CWD Monitoring

		Total no. recorded in the reporting period	Total no. recorded since the project commenced
1-hr TSP	Action	0	0
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Water	Action	0	0
	Limit	0	0
Waste	Action	0	0
	Limit	0	0
CWD	Action	0	0
	Limit	0	0

Remark: Exceedances, which are not project related, are not shown in this table.

Statistics for Complaints, Notifications of Summons and Prosecutions

Reporting Period	Cumulative Statistics		
	Complaints	Notifications of Summons	Prosecutions
This reporting period	0	0	0
From 28 December 2015 to end of the reporting period	17	1	1

Appendix H. Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 June 2020)

Data of SkyPier HSF Movements to/from Zhuhai and Macau (between 1 and 30 June 2020)

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUL - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
17-Jun	10:04	8S912	YFT	Arrival	11.7	-	-
17-Jun	14:08	8S192	YFT	Departure	10.5	-	-
17-Jun	20:11	8S916	YFT	Arrival	10.9	-	-
17-Jun	23:00	8S198	YFT	Departure	10	-	-
18-Jun	10:03	8S912	YFT	Arrival	11.8	-	-
18-Jun	13:58	8S192	YFT	Departure	11	-	-
18-Jun	20:07	8S916	YFT	Arrival	10.8	-	-
18-Jun	22:47	8S198	YFT	Departure	9.9	-	-
19-Jun	10:13	3A061	YFT	Arrival	12.7	-	-
19-Jun	14:04	3A161	YFT	Departure	12.6	-	-
19-Jun	20:08	3A065	YFT	Arrival	11.5	-	-
19-Jun	22:51	3A165	YFT	Departure	12.7	-	-
20-Jun	9:56	3A061	YFT	Arrival	12.8	-	-
20-Jun	13:53	3A161	YFT	Departure	12.7	-	-
20-Jun	19:55	3A065	YFT	Arrival	12.7	<= 5	< 3min
20-Jun	23:24	3A165	YFT	Departure	12.1	-	-
21-Jun	10:05	8S912	YFT	Arrival	12.1	-	-
21-Jun	13:50	8S192	YFT	Departure	11.7	-	-
21-Jun	19:57	8S916	YFT	Arrival	11.4	-	-
21-Jun	22:53	8S198	YFT	Departure	10.6	-	-
22-Jun	9:53	8S912	YFT	Arrival	12	-	-
22-Jun	13:54	8S192	YFT	Departure	12.2	-	-
22-Jun	20:00	8S916	YFT	Arrival	10.5	-	-
22-Jun	22:48	8S198	YFT	Departure	10.4	-	-
23-Jun	9:55	3A061	YFT	Arrival	12.8	-	-
23-Jun	13:53	3A161	YFT	Departure	12.4	-	-
23-Jun	19:59	3A065	YFT	Arrival	12.6	-	-
23-Jun	22:37	3A165	YFT	Departure	12.9	-	-
24-Jun	9:57	3A061	YFT	Arrival	11.5	-	-
24-Jun	13:45	3A161	YFT	Departure	13	-	-
24-Jun	20:07	3A065	YFT	Arrival	12.1	<= 5	< 1min
24-Jun	22:46	3A165	YFT	Departure	12.7	-	-
25-Jun	9:53	8S912	YFT	Arrival	12.3	-	-
25-Jun	13:51	8S192	YFT	Departure	12.5	-	-
25-Jun	19:59	8S916	YFT	Arrival	11.3	-	-
25-Jun	22:37	8S198	YFT	Departure	10.3	-	-

Date	Time [Arrival at / Departure from HKIA SkyPier]	Ferry No.	Connecting Port [XZM - Macao (Maritime Ferry Terminal) YFT – Macao (Taipa) ZUI - Zhuhai Jiuzhou]	Travel Direction [Arrival at / Departure from HKIA SkyPier]	Average Speed within Speed Control Zone (knots)	Extent of Instantaneous Speeding by SkyPier HSFs across SCZ (knots)	Duration of the Instantaneous Speeding (min)
26-Jun	9:54	8S912	YFT	Arrival	12.2	-	-
26-Jun	13:43	8S192	YFT	Departure	12.3	-	-
26-Jun	20:17	8S916	YFT	Arrival	12	-	-
26-Jun	23:06	8S198	YFT	Departure	10.7	-	-
27-Jun	10:02	3A061	YFT	Arrival	11.4	-	-
27-Jun	13:54	3A161	YFT	Departure	11.7	-	-
27-Jun	19:54	3A065	YFT	Arrival	13.3	-	-
27-Jun	22:36	3A165	YFT	Departure	12.1	-	-
28-Jun	9:59	3A061	YFT	Arrival	11.4	-	-
28-Jun	13:57	3A161	YFT	Departure	12.4	-	-
28-Jun	19:54	3A065	YFT	Arrival	12.1	-	-
28-Jun	22:40	3A165	YFT	Departure	12	-	-
29-Jun	10:11	8S912	YFT	Arrival	12.6	-	-
29-Jun	13:42	8S192	YFT	Departure	11.7	-	-
29-Jun	19:58	8S916	YFT	Arrival	11.2	-	-
29-Jun	22:34	8S198	YFT	Departure	11.1	-	-
30-Jun	9:50	8S912	YFT	Arrival	12.2	-	-
30-Jun	13:35	8S192	YFT	Departure	12.6	-	-
30-Jun	19:59	8S916	YFT	Arrival	11.1	-	-
30-Jun	23:21	8S198	YFT	Departure	10.8	-	-

Follow-up on instantaneous speeding

Referring to the data of SkyPier HSF movements in June 2020, instantaneous speeding (i.e. a sudden change in speed at over 15 knots for a short period of time) within the SCZ was recorded from 2 HSF movements of which the durations of all instantaneous speeding cases were less than 3 minute. The AIS data and ferry operators' responses showed the cases were due to local strong water. The captains had reduced speed and maintained the speed at less than 15 knots after the incidents.